

4 512
C O U R S E
OF
MUSICAL COMPOSITION

OR
Complete & Methodical Treatise
OF
PRACTICAL HARMONY.

A. REICHA.

late Professor of Composition in the Royal School of Music and Declamation, Paris.

Translated from the Original

with the remarks of **CARL CZERNY**, translated from the German

by the late

ARNOLD MERRICK.

and Edited by

JOHN BISHOP.

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AUTHOR'S PREFACE.

On comparing modern music with compositions which preceded the eighteenth century a very remarkable difference is found between them. In the latter, scarcely anything more is to be perceived than complicated and artificial combinations of harmony. The musical productions of those times were rather the fruit of an abstract science than of a fine art intended to move the soul and touch the heart. Hence instruction in the art of such composition was but little favorable to taste, imagination, sentiment, or genius. That dry instruction forms the basis of the greater number of the treatises on musical composition hitherto published. It hence results that these works are found incomplete, and most frequently in contradiction with modern music; in which cold calculations are to be avoided, but, on the contrary, are to be employed only ideas, feeling, effects, melody, variety, and truth in the representations of imitative music.

It is true that some persons, of our time, passionately fond of their art, have published works, conceived in a different spirit from those which preceded them; but, notwithstanding all the good they contain, these modern works are still wanting in many necessary developments. For instance, it would be desirable to find, in the works on harmony, satisfactory explanations in regard to the following objects: first, the chief cause that renders a base faulty; second, an instructive and complete theory of modulations; third, the laws according to which nature connects the different chords together; fourth, a more extensive theory of accidental or passing notes, namely those which are not reckoned in the harmony; fifth, the method of forming harmonical progressions; sixth, the principle according to which chords may be correctly broken or divided; seventh, the harmonical resources contained in every scale; eighth, the possibility of doubling, tripling, and quadruplicating harmony in two, three, and four parts; ninth, the conditions to be observed in the exceptional connection of chords in succession; and tenth, the art of employing harmony with the orchestra.

I have endeavoured in consequence to give, in the present course, as far at least as my feeble talents allowed, the desired explanations; and I have given such, not only on the subjects before-mentioned, but also on other matters concerning practical harmony.

In order to render this work more generally useful, I have thought I should lay down rules for composing music correctly in the free style, and blend together the principles of ancient and modern music.

In a work of this nature, as the text cannot have the necessary clearness unless well supported by examples, I have given a great number; and in the impossibility of finding immediately all those I should require, I have thought that by composing them myself they would be more suitable to the text.

It has also appeared to me more advantageous for learners, to set the examples, as much as possible, on one or two staves only, and to avoid multiplying clefs without necessity.

*

GERMAN TRANSLATOR'S PREFACE.

It may be rendering an important service to the musical world to turn into the German language this magnificent work, exhausting as it does every part of the doctrine of harmony. The skill to exhibit to the scholar, with clearness, not only all the rules, but also the various exercises on them, in all the forms of modern pieces — the way to bring the strict principles of musical composition, founded on nature, into unison with the *æsthetic*, ever extending with the requirements of the time and of taste — lastly, the solidity with which every thing is built on plain unalterable ground, and the right consequence with which one rule or remark is evolved from another — place this work of the esteemed author in the rank of the best that ever were written upon these subjects.

The style of the original is clear, plain, and calculated for every class of learners. I have endeavoured, in this translation, to be equally plain and unequivocal, as also in my annotations, which have for object merely to intimate to the scholar here and there, some means of facilitating the exercises and elaborating the themes.

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(This piece serves as an example to the method of analysing musical productions with advantage, indicated page 156.)

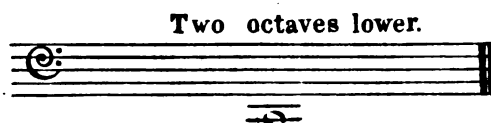
FIRST PART.

ON SOUNDS AND INTERVALS.

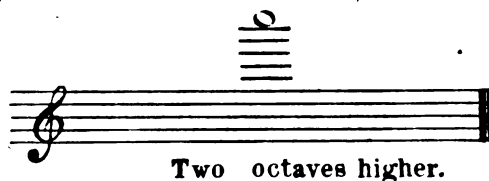
Musical sound is nothing else than the result of the vibrations or oscillations of elastic bodies, and at the same time sounding bodies, when these vibrations are made with the necessary velocity to become appreciable to our auditory organs.

The air, itself the most elastic body, receives immediately these vibrations and as a vehicle conveys them to the ear. It is this regular motion of the air excited by a sonorous body, which, properly speaking, forms the sound, which could not be appreciated nor perceived without that element, as proved by the air-pump, under the exhausted receiver of which, no sound is heard on account of the absence of the air. The gravity of a sound is always in the inverse ratio of the number of the vibrations: thus, the fewer vibrations a sounding body makes in a determined time, the graver is the sound produced; and the more frequent the vibrations, the more acute the sound.

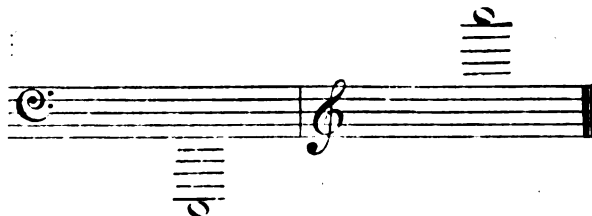
The lowest sound that our ear is capable of appreciating makes about thirty-two vibrations in a second. It corresponds to the following C;



and the highest makes sixteen thousand three hundred and eighty-four, and corresponds to the following C:



Hence all appreciable musical sounds are included between these two Cs. All these sounds are divided into nine octaves; of which the lowest octave and the highest two octaves are not commonly used, so that the sounds employed are reduced nearly to those included between the two Cs following:



Notes have been invented to represent sounds. By notes the composer expresses his ideas: they are to him what colours are to the painter.

Sounds may not only be heard in succession, but also simultaneously: in the first case they serve to produce *Melody*, in the second, *Harmony*.

The first operation that is undertaken with sounds, in regard to *Harmony*, is to make the comparison of one sound with another: the distance or space found between both is called an *Interval*; but, as the same sound may be compared with a great many others, it is evident that there are also different intervals. These intervals are divided into *Seconds*, *Thirds*, *Fourths*, &c; as may be seen in the following Table, in which is likewise shewn the number of semitones of which every interval is composed.

CLASSIFICATION OF INTERVALS.⁽¹⁾

Observations.

Two different intervals which contain the same number of semitones must not be confounded.

Thus, the augmented second (+) and the minor third (\oplus), each containing three semitones, are by no means composed of the same sounds; for the minor third (C, E \flat) is a consonance, whilst the augmented second (C, D \sharp) is a dissonance.

It is evident therefore that these two intervals are of a very different nature, although on the pianoforte (which is tempered, and thereby renders the difference which is found between these two intervals supportable) they are struck on the same finger-keys.

SECONDS.

Unison.	Minor Second.	Major Second.	Augmented Second. (+)
			
Semitone.	Two Semitones.	Three Semitones.	

THIRDS.

Diminished Third.	Minor Third. (\oplus)	Major Third.	Augmented Third.
			
Two Semitones.	Three Semitones.	Four Semitones.	Five Semitones.

FOURTHS.

Diminished Fourth.	Perfect Fourth.	Augmented Fourth.
		
Four Semitones.	Five Semitones.	Six Semitones.

FIFTHS.

Diminished Fifth.	Perfect Fifth.	Augmented Fifth.
		
Six Semitones.	Seven Semitones.	Eight Semitones.

(1) By setting out from any other note whatever, the same Table may be reproduced. Students will do well to employ this method of making themselves familiar with intervals. — R.

In order to avoid uselessly multiplying the names of intervals, seconds may be considered as ninths, thirds, as tenths &c, although the effect of them is not the same.

SIXTHS.

Diminished Sixth.	Minor Sixth.	Major Sixth.	Augmented Sixth.
Seven Semitones.	8 Semitones.	9 Semitones.	10 Semitones.

SEVENTHS.

Diminished Seventh.	Minor Seventh.	Major Seventh.	Octave.
Nine Semitones.	10 Semitones.	11 Semitones.	12 Semitones.

By inverting the intervals, namely, by putting the lowest note an octave higher, the unison becomes an octave, the second becomes a seventh, the third becomes a sixth, the fourth becomes a fifth, the fifth becomes a fourth, the sixth becomes a third, the seventh becomes a second, and the octave becomes a unison.

EXAMPLE OF INTERVALS.

	Unison.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Octave.
<i>Direct.</i>								
<i>Inverted.</i>								

(2) It is of course necessary that the student of musical harmony should be expert in copying music, and should transpose all the examples admitted into this work into the remaining scales. By this practice alone can he make them his own. It must be understood that all examples in major keys must be transposed into major keys only, and all examples in minor keys, into minor keys alone. Besides, the student is particularly advised, especially when reckoning these intervals, and afterward (as I shall intimate in its place) to write every *class* of *chords* in letters also, without notes; for example, the foregoing intervals reckoned from C, as follows:

SECONDS.			THIRDS.			FOURTHS.			FIFTHS.			SIXTHS.			SEVENTHS.				
min:	maj:	aug:	dim:	min:	maj:	aug:	dim:	perf:	aug:	dim:	perf:	aug:	dim:	min:	maj:	aug:	dim:	min:	maj:
d \flat	d	d \sharp	e \flat	e \flat	e	e \sharp	f \flat	f	f \sharp	g \flat	g	g \sharp	a \flat	a \flat	a	a \sharp	b \flat	b \flat	b
c	c	c	c \sharp	e	c	c	c	c	c	c	c	c	c \sharp	c	c	c	c \sharp	c	c

When D is taken as the lowest note, the above table is as follows.

SECONDS.			THIRDS.			FOURTHS.			FIFTHS.			SIXTHS.			SEVENTHS.				
min:	maj:	aug:	dim:	min:	maj:	aug:	dim:	perf:	aug:	dim:	perf:	aug:	dim:	min:	maj:	aug:	dim:	min:	maj:
eb	e	e#	f	f	f#	fx	gb	g	g#	ab	a	a#	bb	bb	b	b#	c	c	c#
d	d	d	d#	d	d	d	d	d	d	d	d	d	d#	d	d	d	d#	d	d

And so on, from every one of the twelve sounds contained within the octave. A like practice is advantageous with the following inversions of intervals. After this translation into letters at first, the same is to be written down in notes, and such forms should be well imprinted on the memory. All theory is of use only when he has it in his power in every respect to reduce it to practice.—C.

To see at a single glance the effect of this inversion, it may be represented by the following figures:

1 — 2 — 3 — 4 — 5 — 6 — 7 — 8
8 — 7 — 6 — 5 — 4 — 3 — 2 — 1. (3)

It must be remarked further —

1st That *diminished* intervals become *augmented* intervals;

2^{ndly} — *minor* intervals become *major*;

3^{rdly} — *major* intervals become *minor*;

4^{thly} — *augmented* intervals become *diminished*.

The *perfect* fourth becomes a *perfect* fifth, and the *perfect* fifth by inversion becomes a *perfect* fourth.

To shew the cause which changes major intervals into minor, and diminished intervals into augmented by inversion, we will analyse the following example:

Nº 1. Nº 2. Nº 3.

Minor third. Major sixth. Major third. Minor sixth. Diminished seventh. Augmented second.

The third is minor in Nº 1., because $E\flat$ is nearer to C than $E\sharp$ (its major third:) the sixth in the same number must be major, on the contrary, because $E\flat$ is more distant from C than $E\sharp$ (its minor sixth.) Thus the $E\flat$ above C lessens the interval, and placed under C enlarges it. For the same reason, the major third in Nº 2. gives, by inversion, a minor sixth; for $E\sharp$, placed above C, is more distant than $E\flat$; and placed under C is nearer to it. The same consideration applies to Nº 3., wherein the diminished seventh ($C\sharp, B\flat$) being the smallest of the intervals of a seventh, has consequently for its inversion ($B\flat, C\sharp$) the largest of the intervals of a second.

TABLE OF INTERVALS WITH THEIR INVERSIONS.

	Minor Second.	Major Second.	Augmented Second.
SECONDS inverted become SEVENTHS.	Major Seventh.	Minor Seventh.	Diminished Seventh.
THIRDS inverted become SIXTHS.	Diminished Third.	Minor Third.	Major Third.
	Augmented Sixth.	Major Sixth.	Minor Sixth.
			Diminished Sixth.

(3) It is worth remarking that the sum of any two of these is 9. As the inversion of an interval is so much as is wanting to complete an octave, it may be thought that the sum should be eight, not considering that the higher note of the one interval is reckoned again as the lower note of the other. — M.

FOURTHS
inverted become
FIFTHS.

Diminished Fourth.	Perfect Fourth.	Augmented Fourth.
Augmented Fifth.	Perfect Fifth.	Diminished Fifth.

FIFTHS
inverted become
FOURTHS.

Diminished Fifth.	Perfect Fifth.	Augmented Fifth.
Augmented Fourth.	Perfect Fourth.	Diminished Fourth.

SIXTHS
inverted become
THIRDS.

Diminished Sixth.	Minor Sixth.	Major Sixth.	Augmented Sixth.
Augmented Third.	Major Third.	Minor Third.	Diminished Third.

SEVENTHS
inverted become
SECONDS.

Diminished Seventh.	Minor Seventh.	Major Seventh.
Augmented Second.	Major Second.	Minor Second.

The unison becomes the octave; and *vice versa*.⁽⁴⁾

Intervals are either consonant or dissonant.

The concords are

The minor Third. The major Third. The perfect Fourth. The perfect Fifth.

The minor Sixth. The major Sixth. The perfect Octave.


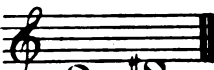
All other intervals are discords.

The perfect fourth, fifth, and octave are called *perfect concords*, because the smallest alteration of either of the two notes composing these intervals makes discords of.

(4) It is the rule to reckon every interval from the lowest sound *upwards*. But still to indicate falling progressions briefly, the expressions under-second, under-third, under-fourth, &c are used, or second, third, or fourth below, and these are reckoned *downwards*. Thus, when it is said the Base goes to its under-fourth, if the Base-note be C the G following next below it is to be taken. If the Base goes to the over-fourth, (fourth above,) in this case the F lying next above the C is taken; and so on with all intervals and keys in like relation. - C.

them;⁵ whilst the third and sixth, which are called *imperfect* concords, may be major or minor without ceasing to be concords.

Remark. *Concords* are intervals which produce in us a soft and pleasant sensation, leaving nothing further to be desired. Intervals which have not this quality, or which have it not in the same degree and the effect of which requires a succession or resolution, are called *discords*.

The cause of the difference existing in general between concords and discords was formerly attributed to various phenomena; but the progress, experiments, and discoveries in *acoustics* in our time prove to us, in a satisfactory manner, that this difference exists only in the more or less simple ratio in which the respective vibrations of the two sounds are found; thus, for example, the ratio between the vibrations of C and E \flat  its *minor third*, which is a concord, is expressed by 5: 6, whilst the ratio between the vibrations of C and D \sharp ,  its *augmented second*, which is a discord, is 64: 75, a ratio which is evidently much more complicated. For the same reason; there exists a difference between the intervals of a minor sixth and augmented fifth, between a major sixth and a diminished seventh, &c. (6)

OF CHORDS.

Chords are composed of several intervals. Chords which contain no dissonant interval are concords; they cease to be concords as soon as any dissonant interval is found in them.

(5) This is not a satisfactory reason, nor has any such been given, for this division of concords. On the contrary, it is a fact that a musical ear will tolerate an alteration, to a certain extent, of every concord from perfect tune, making the interval smaller or larger, yet continuing the same name and character. This alteration is called temperament, and is unavoidable in a succession of different chords, whatever may be the instruments by which it is produced. The smallest alteration meant by the author is that of a chromatic semitone, as it is better expressed by Koch, in his *Lexikon*, p. 363: (1802) Some say that the perfect are so called, because they are the same in the major and minor scales, whilst the imperfect are different on the same degrees. — M.

(6) *Acoustics* demonstrate mathematically the origin of sound, its qualities, propagation, the ratio which exists between sounds, the cause which renders sounds, struck simultaneously, consonant or dissonant, and the nature of the different phenomena produced by them. This science is to music what optics are to painting.

Practical composition goes infinitely farther than acoustics. The former brings into play a great number of means, which the latter science does not and cannot indeed explain; hence the rules of practical composition form a separate code, which, at the same time, has been sanctioned by our auditory organs, feeling, understanding, and the experience of many centuries. It is for this reason that, in treatises on composition, no farther regard is had to the science of acoustics, which is rather a part of natural philosophy than of music.

To persons who are desirous of making themselves familiar with this mathematical part of music, we recommend Chladni's *Acoustics*, as the most esteemed work on the subject. — R.

Since the time of Chladni, they should also study the writings of Savart, W. Weber, &c (see Dr Bind. seil's *Akustik*, 1839); but it is a study to be pressed upon musical instrument makers more than upon musical composers, who will seldom be able to devote sufficient time to the purpose. — M.

CLASSIFICATION OF CHORDS.

	1.	2.	3.	4.
	Perfect Major Triad.	Minor Triad.	Chord of diminished fifth, or diminished triad.	Chord of augmented fifth.
Triads or Chords of three sounds.				
	5.	6.	7.	8.
	1 st species of seventh or dominant seventh. This chord is form- ed by adding a minor 7 th to the major triad.	2 nd species of 7 th . This chord is composed of the perfect minor triad & the minor 7 th .	3 rd species of 7 th . This chord is composed of the diminished triad & the minor 7 th .	4 th species of 7 th . This chord is composed of the major triad and the major seventh.
Chords of the Seventh of four sounds:				
	9.	10.		
	Chord of the Major ninth. This chord is composed of the dominant seventh and the major ninth.	Chord of the Minor ninth. This chord is composed of the domi- nant seventh and the minor ninth.		
Chords of the Ninth of five sounds.				
	11.	12.	13.	
	Chord of the augmented 6 th .	Chord of the augmented fourth and sixth.	Chord of the augmented fifth with the seventh. (7)	

Remarks. — Several of these chords taken alone seem to be insupportably harsh; but by the manner in which they are employed, not only can they be made to lose that seeming harshness, but to produce very happy effects. Hence then; before pronouncing on the good or bad quality of chords, they must be examined in their connection with perfect chords, and the indispensable conditions must be known without which they cannot be used with success.

There are but thirteen chords in our musical system, as appears by the preceding table; but as these chords may be inverted and more or less altered by notes foreign to them (such as passing-notes, appoggiaturas, suspensions, &c.), it frequently happens that these

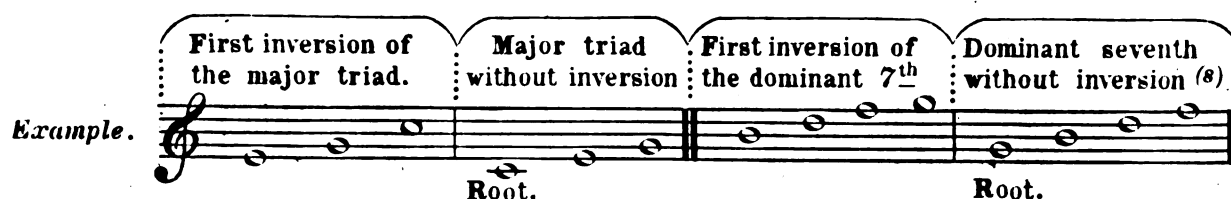
(7) Among these thirteen chords, the first two only are consonant: the others are more or less dissonant. The numbers 1, 2, 3, 5, 6, 7, 8, 9, and 10 are fundamental (or radical) chords, three of which undergo an alteration and furnish the four chords of numbers 4, 11, 12, and 13, which are called in consequence *altered chords*. See note (8) following. — *R.*

Numbers 1, 2, 3, 5, 6, 7 and 8 are the fundamental chords of Gottfried Weber. He denotes briefly the major triads, by their roots only, in *Italic capitals*; minor triads, in like manner, by *small Italics*; diminished triads, by *small Italics with a small zero*, thus, *g°*, *b°*, &c. When a minor seventh is added to any of these triads, a small 7 is added to the respective letter, thus, *G7*, *d7*, *b°7*, &c.; and to distinguish the triad bearing a major seventh, the seven added has a dash across it, thus, *C7̄*. — *Tonsetzkunst*, I. 128. &c. 1817. — *M.*

inversions and accidental alterations are taken for so many other chords, which do not really exist, and which only embarrass the mind and retard the progress of the learners. In every chord, there is one note which is called the principal or fundamental note, the *fundamental base*, [or root.]

In order to explain clearly the principles of the succession of chords, it is of importance to know how to point out correctly this note in any chord whatever.

In order to find the fundamental note of the inverted chords, it is only necessary to place the notes of these chords in such a way as to form a succession by thirds: thus arranged, the lowest note is always the fundamental note, or root.



(8) In order to comprehend perfectly what follows, it is important to study this note. In the preceding classification, there are four altered chords, namely, the 4th, 11th, 12th, and 13th. Nature allows us, under certain conditions, (which we shall point out in the proper place,) first, to raise the perfect fifth a semitone in a major triad, giving the chord N^o 4; secondly, to lower the perfect fifth a semitone in a chord of the minor ninth, by putting that altered fifth in the base and suppressing the fundamental note, giving the chord N^o 11; thirdly, to lower in like manner the perfect fifth a semitone in the chord of the dominant seventh, putting that altered note in the base, which gives the chord N^o 12; fourthly, to raise the perfect fifth a semitone in the chord of the dominant seventh, placing it above F, which gives the chord N^o 13.

It appears, at first view, rather strange to assign to the chord N^o 11, the G (which cannot be struck with that chord) as the fundamental base; yet nothing is more true. Nature observes but a *single* principle (which is without exception) in the resolution of any discord whatever. This principle is that the fundamental [or radical] base of a discord ought to form with the fundamental base of the following chord an *under-fifth*, (G, C.)

Thus all the discords of this classification resolve necessarily on the triad of C as we shall perceive. Hence it is easy to find the fundamental base of any discord whatever as soon as the chord is known on which it naturally, without exception, resolves, and *vice versa*; for if the fundamental base of the chord following and resolving the discord is C, the root of the discord should be G, and if the fundamental base of the discord is G, that of the chord following should be C. Let us return to the chord N^o 11: it resolves on the major triad of C, the fundamental base of which is consequently C; hence the fundamental base of the chord N^o 11 must be G; or, otherwise it would follow: first, that N^o 11 would have no fundamental base, which it would be absurd to suppose; or, secondly, that some other note than G would be its fundamental base: in this second case, nature herself would make an exception to her law, and the principle would contradict itself. But why should not G be struck with this chord, if it is its fundamental base? It is a condition of the alteration.

If you would strike G in this chord, A \flat must be suppressed (because there would be a too great complication of discordant intervals which the ear would not be in a state to distinguish) and in this case you would obtain the chord N^o 12. Again, the two chords of the ninth are almost always struck without the root, and hence arises what is commonly called the chord of the diminished seventh (B, D, F, A \flat), which is only the chord of the minor ninth without its root (G.)

It will be objected that the discords may be resolved thus in a manner different from that shewn above. No doubt: these are exceptions which the Artist allows himself, but which are not made by nature, for in the case wherein the exception is employed, the true resolution does not exist, and it is always necessary to continue till a resolution by a fifth downwards, according to the natural law. These exceptions may be good and even excellent: in order that they may be allowed, nature requires that other conditions be observed (which we shall point out in the proper place) and that we proceed with skill and understanding, without which they become bad, whilst nothing will ever be risked by resolving the discords according to the law prescribed by nature. R.

In the preceding classification, the G is the principal note of all the chords given: that is obvious for the first ten chords, as well as for the thirteenth, in all of which the root is found below; but this is not so in the two others. In N^o 11, the principal note is suppressed, and consequently the chord is found inverted.

In order to be convinced that it is still G which is the principal note, it must be observed that this chord is derived from the tenth chord, by suppressing the G, placing the D in the base and lowering it a semitone (namely Db.)

The following example makes it clear.

Chord N ^o 10.			Chord N ^o 11.
Chord of the minor ninth.	The same without G.	The same with D in the base.	The same with alteration.

The chord N^o 12 of the classification has a similar origin. It is derived from the chord of the dominant seventh (G, B, D, F,) by putting D in the base and lowering it a semitone.

Chord N ^o 5.		Chord N ^o 12.
Dominant seventh	The same with D in the base.	The same with D flattened.

This analysis shews that G is their principal note or root as well as of all the other chords contained in the table. (9)

Every one of these thirteen chords can be reproduced twelve times in the musical system, because all the semitones contained in the limits of an octave may be taken successively as roots and the same number of chords may be found on each. Thus, by taking A for the root, and transposing the table a tone higher, we shall have a se-

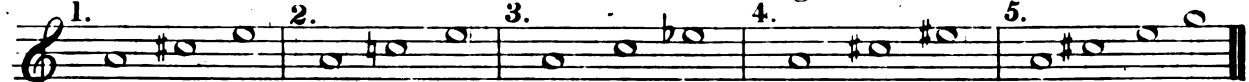
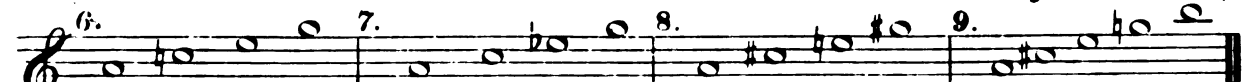
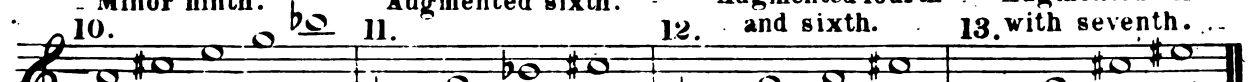
(9) The chord of the seventh of the third kind (G, Bb, Db, F) may equally be considered as the origin of the chord of the augmented fourth and sixth (Db, F, G, B,) by putting the first of these two chords into its second inversion and raising the Bb a semitone.

Whether this discord be considered as an alteration of the dominant seventh or the chord of the third species, its radical base in both cases is always G, and it is this which is the most important to know with reference to the connection of chords. Besides, the disputes which have arisen as to the origin of some chords have resulted in nothing useful to the art: of what importance, indeed, is it to assign to a chord such or such a chord for its origin, provided you know how to employ it well? It is the same with the wars about the etymology of words: poets and orators cease to take any part in them, as soon as the meaning and use of the words are known.

In regard to the conditions required for putting every chord in its place; we shall give them further on, by analysing every chord of the classification separately. — R.

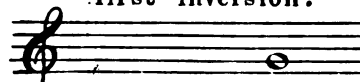
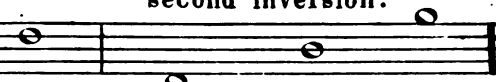
cond table composed of the same chords. (10)

EXAMPLE.

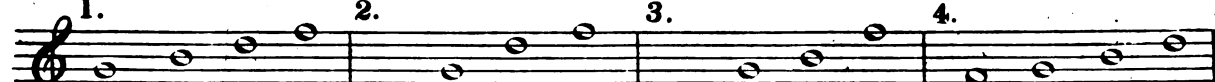
Major triad.	Minor triad.	Diminished triad.	Augmented fifth.	Dominant seventh.
1.	2.	3.	4.	5.
				
Root.				First species.
Chord of the seventh.	Chord of the seventh.	Chord of the seventh.	Major ninth.	
6.	7.	8.	9.	
				
Second species.	Third species.	Fourth species.		
Minor ninth.	Augmented sixth.	Augmented fourth and sixth.	Augmented fifth with seventh.	
10.	11.	12.	13.	
				

OF THE INVERSIONS OF CHORDS.

A chord is inverted when its root is not placed in the base; (11) thus the following chord is inverted because its principal note [its root,] which is *G*, is not the lowest:

Triad of <i>G</i> in its first inversion.	The same in its second inversion.
	
Root.	Root.

The inversions of a chord do not change its nature; but are only modifications. Hence the following four examples offer but one single chord in four different forms:

Dominant seventh.	First inversion of <i>D</i> ⁹	Second inversion.	Third inversion.
1.	2.	3.	4.
			
Root.	(12)		

(10) Here again it is of importance that the learner, in order to become perfectly familiar with the derivation of all chords, should write all the examples hitherto given, first in letters and afterward in notes, transposing them into all keys.—*C*.

(11) In composition the lowest part of the harmony is called the base; hence if a trio were made for three treble voices, one of them would necessarily be the base.—*R*.

(12) Called, in short, the chord of the dominant seventh, because it occurs on the dominant (or fifth degree of every scale) and so that itself and its three inversions (the chord of the fifth and sixth on the seventh degree — of the third and fourth on the second degree — of the chord of the second on the fourth degree) have their natural resolution on the triad of the tonic, or key-note.

Since this resolution is particularly called for by the leading-note, (or sensible note) contained in it, which is the *major* seventh of every scale, many teachers of harmony call it the *characteristic seventh*, to distinguish it from the other chords of the seventh which can be taken on other degrees.—*C*.

When the third above the root is the base, the chord is in its first inversion. By putting the fifth above the root in the base, the second inversion is formed; and the seventh above the root put in the base gives the third inversion. The major, minor, diminished and augmented triads admit of two inversions each; and the four chords of the seventh admit of three inversions each. The other chords of this classification are not practicable in all their inversions.

Here follows a third table of all the chords of the classification, to which I have added all the inversions employed.

TABLE OF CHORDS WITH THEIR INVERSIONS USED.

N ^o 1. Major triad.	1 st Inversion.	2 nd Inversion.	N ^o 2. Minor triad.	1 st Inversion.	2 nd Inversion.
N ^o 3. Diminished triad.	1 st Inversion.	2 nd Inversion.	N ^o 4. Augmented triad.	1 st Inversion.	2 nd Inversion.
N ^o 5. Dominant 7 th .	1 st Inversion.	2 nd Inversion.	3 rd Inversion.		
1 st Species.					
N ^o 6. Chord of 7 th .	1 st Inversion.	2 nd Inversion.	3 rd Inversion.		
2 nd Species.					
N ^o 7. Chord of 7 th .	1 st Inversion.	2 nd Inversion.	3 rd Inversion.		
3 rd Species.					
N ^o 8. Chord of 7 th .	1 st Inversion.	2 nd Inversion.	3 rd Inversion.		
4 th Species.					
N ^o 9. Chord of Major 9 th .	1 st Inversion.	2 nd Inversion.	3 rd Inversion.	N ^o 10. Minor 9 th .	
(13)					
1 st Inversion.	2 nd Inversion.	3 rd Inversion.	4 th Inversion.	N ^o 11. Chord of Augmented 6 th .	1 st Inversion.
(14)					

(13) In the inversions of the two chords of the ninth the radical base is suppressed almost always. See on this subject the analysis of these chords, pages 45 and 46.—R.

(14) Before transposing all these examples into the other keys, the learner is in the first

Nº 12. Chord of augmented fourth and sixth. Inversion little used.

Nº 13. Chord of augmented fifth. 1st Inversion.

REMARKS ON HALF CADENCES AND ON WHOLE OR PERFECT CADENCES.⁽¹⁵⁾

A repose on the perfect triad of the dominant is called a *half cadence*. A repose on the perfect chord of the tonic is called a *perfect cadence*.⁽¹⁶⁾

In the first case, the chord of the dominant is always major and without inversion; in the second case, the chord of the tonic is major or minor, according to the mode in which it is found, and is also without inversion; likewise it must be indispensably preceded by the chord of the dominant, not inverted, to which the seventh is frequently added.

In order to prepare one of these two cadences, they must be preceded by a certain number of measures (or bars) and chords, which the feeling of the composer can alone determine.

All the half cadences are alike as to their last chord; but the preceding chords may give them different forms.

place to make the following table.

TABLE OF MAJOR TRIADS WITHOUT INVERSION.

<i>g</i>	<i>g#</i>	<i>a</i>	
<i>e</i>	<i>e#</i>	<i>f#</i>	&c.
<i>c</i>	<i>c#</i>	<i>d</i>	

whereby those keys which have sharps as well as flats will be written, (as *F# Gb*) which are to be written twice.

TABLE OF MINOR TRIADS WITHOUT INVERSION.

<i>g</i>	<i>g#</i>	<i>a</i>	<i>a</i>	
<i>eb</i>	<i>e</i>	<i>fb</i>	<i>f</i>	&c.
<i>c</i>	<i>c#</i>	<i>db</i>	<i>d</i>	

so all the rest of the inversions and chords, after which the transposition in notes follows.—C.

(15) We have thought that we ought to place these remarks here in order to fix the cases in which it is indispensable to employ direct (not inverted) chords, and likewise to complete the following article on the base.—R.

(16) The 1st, 3rd, and 5th degrees, in any key whatever, are called the *tonic*, *mediant*, and *dominant*. Thus, in the key of C, C is the tonic, E is the mediant, and G is the dominant. The triad of the tonic is C, E, G, and that of the dominant is G, B, D.—R.

To this may be added that the 2nd, 4th, and 6th degrees are named respectively the *supertonic*, *subdominant*, and *submediant*: thus, in the key of C, D is the supertonic, F is the subdominant, and A is the submediant. The 7th degree, when it is only a semitone below the 8th, is called the *leading-note*; but, when it is a whole tone below, as in descending minor keys, it is named the *subtonic*: thus, in the key of C, B is the leading-note, and Bb the subtonic.

The late Dr W. Croft denoted the different degrees of every scale by the Latin syllables DO, RE, MI, FA, SOL, LA, SI, printing them in Roman letters to denote the major key and in Italics to denote the minor. Again other writers use Roman numerals to denote the different degrees, I, II, III, IV, V, VI, VII, VIII. In some works on harmonics, these are used to denote major intervals, and the Arabic numerals to indicate minor intervals. The latter also, with or without additional marks, are used to denote intervals and chords in figured bases. M.

EXAMPLES

FORMS OF THE HALF CADENCES.

N^o 1. N^o 2. N^o 3. N^o 4.

In C Major Mode.

In A Minor Mode.

N^o 5. N^o 6. N^o 7. N^o 8. N^o 9.

The perfect cadences differ in like manner with regard to the antecedent chords.

FORMS OF PERFECT CADENCES.

N^o 1. N^o 2. N^o 3.

In C Major.

In A Minor.

N^o 4. N^o 5. N^o 6. N^o 7.

Musical phrases are distinguished one from another by means of these cadences. When the meaning of a phrase excites the expectation of a perfect cadence, which the composer thinks proper to avoid, he then makes a *broken or deceptive cadence*.

Deceptive cadences, known also under the names of avoided, interrupted and false cadences, are very much used and almost always with certain effect, when they are properly introduced: they arouse attention and give energy to the phrase following.

To break a perfect cadence, it would be sufficient to invert the last chord; but it may also be broken in many other ways: we have collected the most employed in the following table.

FORMS OF BROKEN CADENCES.

	Nº 1.	Nº 2.	Nº 3.	Nº 4.	Nº 5.
In C Major.					
In A Minor.					

Nº 6.	Nº 7.	Nº 8.	Nº 9.	Nº 10.	Nº 11.	Nº 12.	Nº 13.

It is seen by these examples that a cadence is broken — first, when one of the last two chords is inverted or both at once; secondly, when any other chord is taken in place of that of the tonic.

As we cannot terminate without a perfect cadence, it is evident that every interrupted cadence must be followed by a continuation of harmony. (18)

With regard to the chords employed in all these forms, the explanation of them will be seen farther on. (19)

(17) Beginning from this example, I have contented myself with giving only the last two chords of the deceptive cadences. — *R.*

(18) It is necessary to form a clear idea of the nature of the cadences: one is a perfect repose, and the other a slight repose which requires a succession. The perfect cadence may be compared to a full period in language, and the half cadence to the incomplete phrases of the period. The forms which terminate a cadence, or which interrupt it, are often placed in the course of the phrases, so as neither to be felt nor to interrupt the great regularity in the progression of the chords. — *R.*

(19) Henceforward it will be sufficient if the following examples be transposed into the other keys in notes only. Besides it is very advantageous, and even necessary, for the learner to be able at least to read correctly and play slow chords on the pianoforte, where possible, and transpose into other keys. The effects of harmony are to be conceived through the ear only, and what instrument is more suitable for the purpose than the pianoforte [or organ]? — *C.*

ON THE BASE.

I have already remarked that the part which performs the lowest notes of the harmony is called the base; thus, in N^o 1. of the following examples, the part which is placed on the upper stave forms the treble, and in N^o 2. the same part becomes the base, because it takes the lowest notes of the harmony, all the other notes being now higher.

EXAMPLES.

The base may be faulty, if the inversions of the chords are placed improperly, and particularly if the composer does not know how to treat the *perfect fourth* which occurs *between the base and a high part*, in the second inversion of chords.

CHORDS NOT INVERTED:

- 1st The chords which begin and terminate a piece.
- 2nd The last chord of a half cadence.
- 3rd The last two chords of a perfect cadence.
- 4th The last chord but one of an interrupted cadence. ⁽²⁰⁾

CHORDS INVERTED.

- 1st In the course of phrases.
- 2nd Often after half cadences.
- 3rd Oftener still at the end of broken cadences.
- 4th Sometimes also after a perfect cadence.

REMARKS ON THE PERFECT OR CONSONANT FOURTH
WITH REGARD TO THE BASE ⁽²¹⁾

Experience has proved that the chords in which this interval occurs between the base and one of the upper parts produce a bad effect, if the rule has not been followed

⁽²⁰⁾ This rule has only the following exceptions:

In these three examples, the cadence is already interrupted on the last chord but one. — R.

⁽²¹⁾ Many theorists consider the perfect fourth as a discord when formed between the base and an upper part, because it then requires preparation. If this reason were sufficient, it would follow that the major second, the augmented second, the augmented fourth, the diminished fifth, the augmented sixth, the diminished seventh, and the minor seventh would be consonant intervals, because they may be struck without preparation; and this strange consequence would result, that the augmented fourth would be a concord whilst the perfect fourth would be a discord. Besides, it is of little consequence whether the perfect fourth be regarded as a concord or a discord, provided we know how to employ it well in practice. — R.

which teaches how to treat them properly. Knowing well how to employ this fourth and observing at the same time what I have already said on the inversions of chords, the student will at least be able to write a base free from fault.

This fourth is found in the second inversion of the following chords:

SECOND INVERSIONS

1. Major triad. 2. Minor triad. 3. Dominant 7th. 4. Chord of 7th. 2nd species. 5. Chord of 7th. 4th species.

Root.

In these five chords, the base forms, with one of the high parts, the interval D, G, namely, a perfect fourth.

In order to make the rule clearer which must be followed in the employment of this fourth,⁽²²⁾ we shall explain the following examples which (for greater clearness) we have formed in two parts only.

N^o 1.

EXAMPLE.

Preparation of the fourth by the base.

This example is good because the two intervals have a note in common (G) which continues in the same part immovable. This common note connects the two intervals more closely and thus renders the fourth practicable. We will call this case the *preparation of the fourth by the base*, because it is in this part that the common note is found.

N^o 2.

EXAMPLE.

Preparation of the fourth by an upper part.

This example is good because the two intervals have a note in common (D) in the upper part. We will call this case the *preparation of the fourth by an upper part*, because it is there that the common note is found.

In this second case, it must be remarked that the base ought never to move but the interval of a second to arrive at the fourth.⁽²³⁾

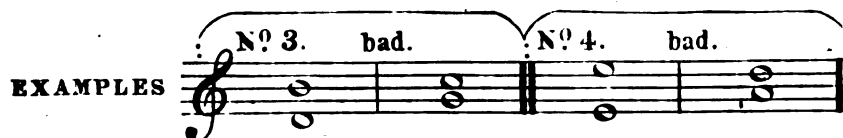
(22) It must not be lost sight of, that the matter in question is the perfect fourth made between the base and a high part. There is no remark to be made on the fourths when they are formed between two high parts, and are accompanied by a third part below them. — R.

(23) The base may arrive at the fourth by the step of another interval, when the chord does not change:

EXAMPLE.

1. 2. 3. 4. — R.

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These two examples are bad, because the two intervals have no note in common, so that the fourth is not prepared.

EXAMPLES

N° 5. good. bad.

This example is bad, because the second 4th is not prepared by a common note.

N° 6.

This example is good, because the second 4th, which is unprepared, is not a perfect fourth. See the table of Intervals.

All this is reduced to the following rule: the perfect fourth must be prepared by a common note, either in the base or in an upper part, and in the latter case the base must rise or fall one degree or letter.

There is but one single exception to this rule, and this exception occurs in the cadences, of which the following are the forms:

Half Cadences.

Perfect Cadences.

In all these cadences, the perfect fourth, D, G, is not prepared by a common note. This imperfection is remarkable inasmuch as it makes the cadence more earnestly desired and renders it more decisive; it is for this reason that it is tolerated.

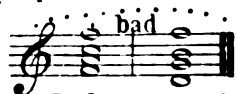
As the perfect fourth is formed (between the base and an upper part) only in the second inversion of the chords N°s 1, 2, 5, 6, and 8 of the classification, we shall give here, for greater clearness, the following examples of this inversion with the necessary preparation.

Major triad.

Minor triad.

Dominant seventh.

Chord of the seventh,
fourth species.

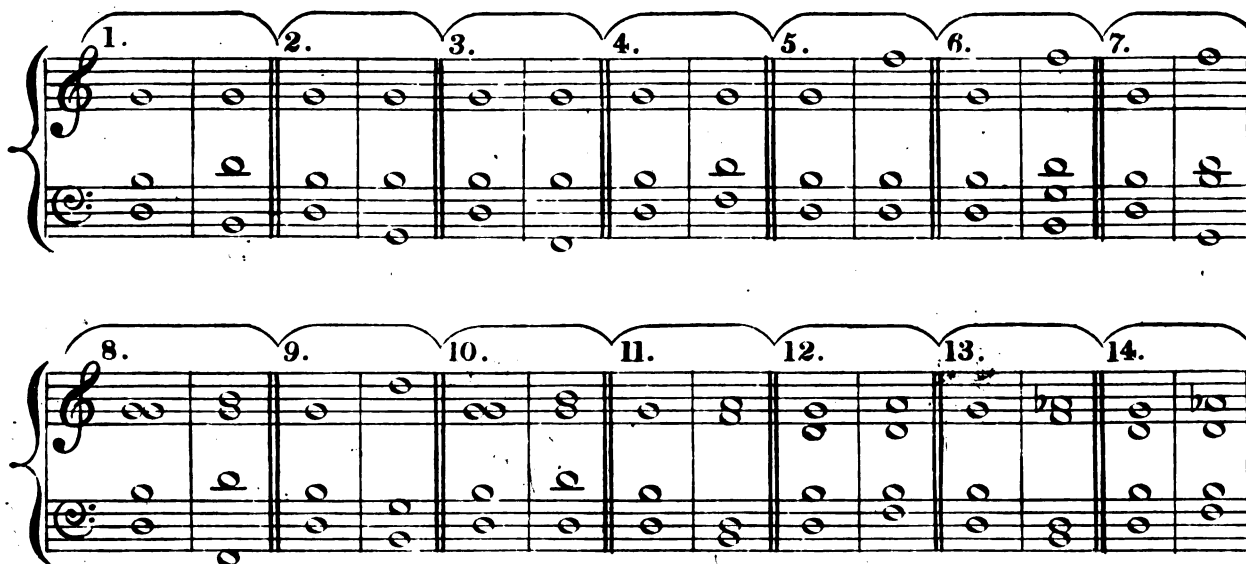
It sometimes happens that it is desirable to employ the chord of the dominant seventh in its second inversion, which does not allow of the preparation of the fourth occurring between the base and an upper part, as for example:  It is obvious that in the first of these two chords there is neither G nor D for preparing the perfect fourth in the second chord. To render this case practicable, the G is suppressed, namely the root of the dominant seventh.



In the example in four parts, the F (or seventh of the chord — the discordant note) is doubled, and one of the F's rises and the other falls one degree for its resolution. Besides the preparation of this fourth, it is also necessary to avoid committing faults in resolving it, which would happen if the parts between which it occurs (the base especially) made a false progression to the following chord:

First, if the following chord is the same, or if its root is common to both chords, the progression of the parts is without any difficulty.

EXAMPLE, in which the radical base is G from the beginning to the end.



The second chord of the last four examples is the major and minor ninth, G, B, D, F, A.

It is understood that, in all these examples, the fourth in the first chord must be prepared as we have shewn, and the second chord regularly resolved when it is a discord.

Secondly, if the two chords have not a common root, the base in this case can rise or fall but a semitone or a whole tone in proceeding to the next chord: when the base cannot

take this step, the use of this fourth must be avoided. Thus the base will proceed as follows:



And upon the second note any chord whatever may be taken, provided the chords connect with each other freely, and the base does not form another perfect fourth with one of the other parts. Here follows a great number of good examples, which are all practicable, as well in regard to the succession of chords as to the modulation which is desired to be made in setting out from the first chord.



Rising base.



Falling base.



When the base-note is common to both chords which have different roots, as often happens, the base then continues on the same degree. See the following example:

EXAMPLE.

As to the high part which forms the fourth with the base, it is less restrained in its progression to the second chord; yet, in this case, the following rule must be observed as much as possible, especially in the parts which accompany:—When the note in the high part is common to both chords, it is to remain on the same degree; but when it is different, make that part rise or fall to the nearest note of the following chord. See the preceeding examples in which this rule is everywhere followed.

Nevertheless the following examples are often written, especially in the part which has the melody:

I have felt under the necessity of developing this important matter as much as possible, finding that the preparation of this fourth has not been mentioned in nearly all elementary works, and that what they contain respecting its resolution is very far indeed from being sufficient. I advise learners to take this article into consideration: it contains the secret of a base free from faults. By these means they will facilitate the study of double counterpoint, and will be convinced of the necessity of treating the perfect fifth as a discord in double counterpoint in the octave, because it becomes a perfect fourth when inverted.

ON THE SUCCESSION OF PERFECT TRIADS.

THEIR POSITION, THE MOTION OF THE PARTS, THE PREPARATION AND RESOLUTION OF DISCORDS.

I. ON THE SUCCESSION OF PERFECT TRIADS. (24)

The only way to explain a succession of triads consists in examining their principal notes or roots. According to this principle we shall examine the succession of chords following:

(24) Sounds and chords, taken individually, are what syllables and words are for poetry and discourse. If we placed either at random, they would offer no meaning to the mind nor to the feelings. This truth is generally acknowledged in languages, but not so with like evidence in regard to music. — R.

As these nine chords are not inverted, their roots are found in the base. These roots in succeeding one another make the following steps or intervals:

From the 1st to the 2nd chord, a fifth below.

From the 2nd to the 3rd chord, a fifth above.

From the 3rd to the 4th chord, a fourth below.

From the 4th to the 5th chord, a fourth above.

From the 5th to the 6th chord, a third below.

From the 6th to the 7th chord, a third below.

From the 7th to the 8th chord, a third below.

From the 8th to the 9th chord, a fourth above.

The consequence of this analysis is — that two triads are well connected together, when their roots make —

1st a third below.

2nd a fourth below.

3rd a fifth below, or, what amounts to the same.

1st a sixth above.

2nd a fifth above.

3rd a fourth above.

We shall adopt the first manner of seeking the root, and reckon by a third, fourth, and fifth downwards. When inversions of the triads are employed, the roots are not placed in the base. These inversions change the appearance of a triad without changing its nature, hence it is evident that the progression of the roots always remains the same.

EXAMPLES.

1. Direct triad of C. Direct triad of G.

2. 1st Inversion of the triad of C. 1st Inversion of the triad of G.

In both these examples, the radical or fundamental base is C, G, — making a fourth downward. This admitted, it is evident that a succession of triads can be formed, some inverted and others not inverted: this gives a base which may not appear regular in its progression, but which is so in reality, when we seek its radical base. (25)

EXAMPLE

Radical Base.

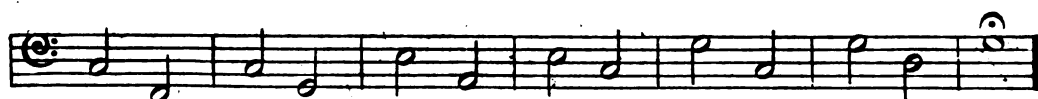
(25) It is the root which gives name to a triad: thus, if a triad has C for its root, it is called the triad of C, if it has G, it is called the triad of G, &c. — R.



Besides, a succession of triads may be written in which the three different steps or progressions of the roots may be introduced, so that the notes may make by turns a third, a fourth, a fifth downwards, or else two thirds and a fourth, two fifths and a third, &c — the number of any one of these three intervals being quite arbitrary.

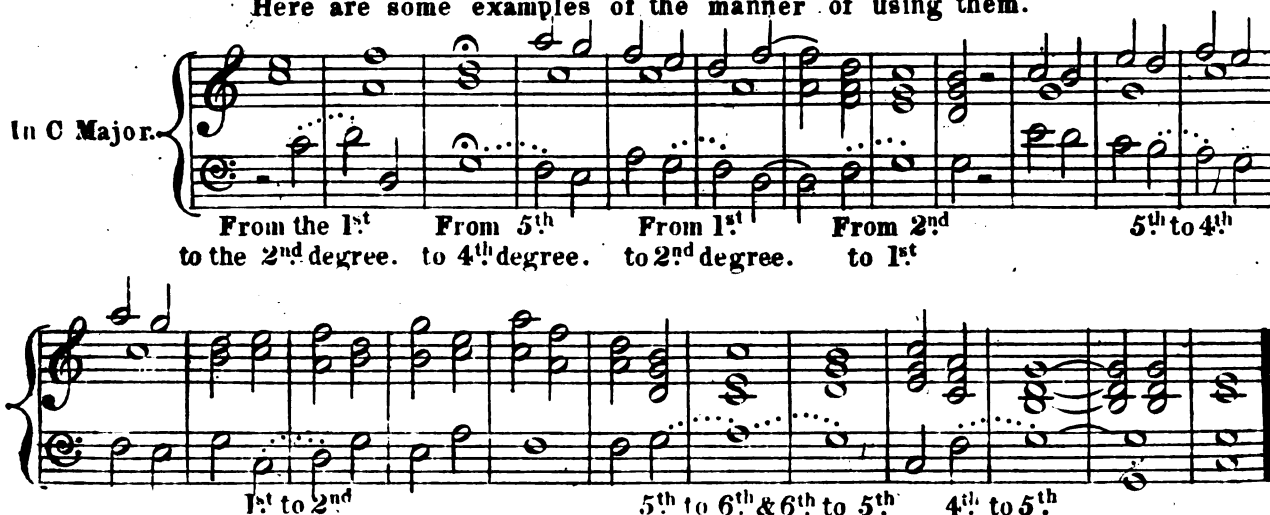


**Radical
Base.**



In a determined scale, two triads may also succeed by a second, but only as follows:
First, From the 1st to the 2nd, or, from the 2nd to the 1st degree of the scale.
Secondly, From the 4th to the 5th, or, from the 5th to the 4th degree.
Thirdly, From the 5th to the 6th, or, from the 6th to the 5th degree.
 These three cases, which are rather to be considered as exceptions, are, for that reason, to be employed much more rarely than the succession by third, fourth, and fifth below.

Here are some examples of the manner of using them.



The same example for all minor keys.

In C Minor.

From 1st to 2nd 5th to 4th 1st to 2nd 2nd to 1st

5th to 4th 5th to 6th 5th to 6th 6th to 5th

This example, the same as the preceding, shews with few alterations, that the three exceptions occur equally in the minor keys.

The succession of triads in which the roots rise a third or fall a sixth seems not to be linked together so naturally. It cannot, however, be excluded; but to render it practicable, care must be taken to make the triad of the fifth below follow the triad of the third above, so that the radical base shall take C, E, A, or rather A, C, F.

EXAMPLE.

To 3rd above 5th below the same the same

This succession is more natural when the second chord is major.

EXAMPLE.

Radical Base.

Roots:

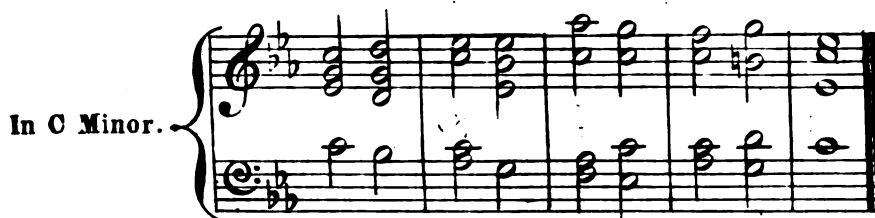
There is yet one exception deserving notice, namely, that of passing from the third degree to the fourth. In a progression of triads, it is done as follows:

EXAMPLE.

5th to 6th 3rd to 4th 1st to 2nd

9489

5th to 6th 3rd to 4th 1st to 2nd



A succession of triads by seconds is permitted only when these chords are in their first inversion. Such a succession is called a *succession of sixths*.

EXAMPLE.



It is very difficult to say why this irregular succession is nevertheless agreeable to the ear. It may be attributed to the diatonic progression of every part, and to a peculiar charm which these chords possess in their first inversion.

In the minor keys, the triads of the fourth and fifth degrees are employed sometimes with the minor third and sometimes with the major third. This arises from the frequent necessity of raising the sixth and seventh degrees of the minor scale a semitone.

Here are Examples.



But we may equally do thus:



6. The same.

7. Where the chords on the 4th and 5th degrees are maj: and min:

8. The same.

In all these cases, the chords of the fourth and fifth degrees must succeed each other immediately, as seen in the above examples.

II. ON THE POSITION OF CHORDS, OR DISTRIBUTION OF THE NOTES BETWEEN DIFFERENT PARTS.

That which contributes greatly to the connection and effect of a succession of chords is the nearness of their respective sounds [as to pitch.]

The two triads of G and C, which connect very well in the following position:

would have a very disunited bad effect, if the second triad were taken thus:

We shall call the *position* of a chord the manner in which its notes are distributed between the different parts.

This position may be more or less close together, more or less dispersed.

EXAMPLE.

Close position. Less close position. Dispersed position. Very dispersed

In commencing a piece of music, the position of the first chord is quite arbitrary, but not so the position of the second chord: it must be the same as the first. This gives occasion for the following rule:— The position of one chord determines the position of the chord succeeding it. The following four examples are composed of the same chords, in four different positions.

1. Close position. 2. Less close position. 3. Dispersed position. 4. Very dispersed position.

It appears, by these examples, that the same phrase may be varied by merely putting the chords in different positions. The rule as to the position of chords and the proximity of their respective sounds does not prevent any one of the parts from taking, from time to time, a skip of a third, fourth, fifth, or sixth, particularly when the harmony proceeds only by perfect triads. — See the following example:



The discords very seldom permit these skips in the parts.

As chords cannot always keep the same position, it is essential to know where and how it can be changed. This can be done,

1st, after a perfect cadence;

2^{ndly}, after a half cadence; but less often;

3^{rdly}, in the course of a phrase, when two similar chords follow each other. In this third case, attention must be paid to change the position on the second of the two similar chords.

4^{thly}, in repeating the same phrase.

EXAMPLES.

Examples 1 through 6 illustrate various ways to change the position of chords:

- Example 1:** Shows a phrase with a "Perfect Cadence" and a "Half Cadence".
- Example 2:** Shows a "First change of position after a perfect cadence."
- Example 3:** Shows a "Second change of position after a half cadence."
- Example 4:** Shows a "Third change of position on repeating the same chord."
- Example 5:** Shows a phrase with a "Fourth change of position on repeating the same phrase."
- Example 6:** Shows a phrase with a "Fourth change of position on repeating the same phrase."

These six numbers form a continuous piece and may be performed in succession as a whole.

The same phrase often finishes in a position of chords different from that with which it began, as may be seen in N^o 1. of the preceding examples. That depends entirely on the progression of the chords.

III. ON THE MOTION OF THE PARTS.

One part, considered by itself, moves in three ways:

First, by remaining on the same degree, either repeating the same sound several times in succession, or sustaining it through one or more measures;



Secondly, by rising by conjunct or disjunct degrees:



Thirdly, by descending also by conjunct or disjunct degrees:

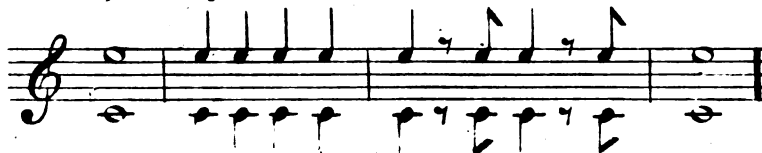


A part may make an infinitely varied succession of notes by means of these three motions. Sometimes these three motions are found united in a single measure:



By comparing the progress of one part with that of another part, we find the four following motions:

First, The parallel motion:



in which each of the two parts continues on the same degree.

The difference in the duration of the notes does not alter the nature of this motion:



Second, The oblique motion:



wherein one of the parts remains on the same degree, whilst the other moves in every direction.

Third, The similar motion:



in which both parts rise or fall at the same time by conjunct or disjunct degrees.

Fourth, The contrary motion:



wherein one part rises while another part falls.

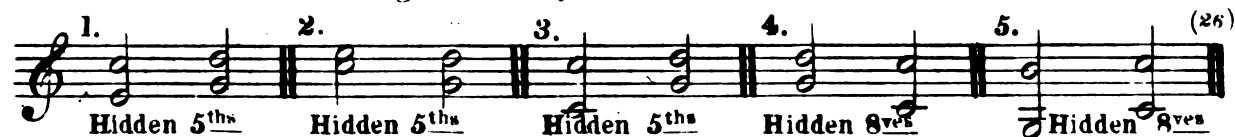
In composing in more than three parts, it is always necessary to compare the motion of one part not only with a second, but also with a third, fourth, &c, otherwise there will be risk of committing frequent faults.

It may readily be conceived that one part may proceed in similar motion with a second part, in contrary motion with a third, and in oblique or parallel motion with a fourth part.

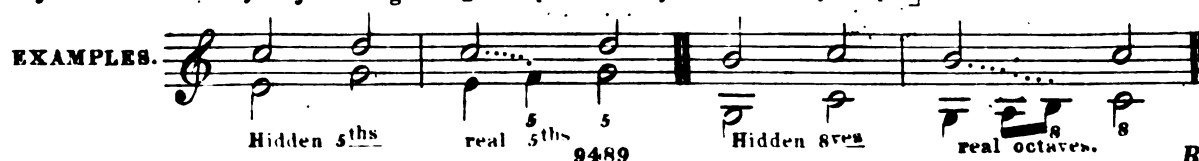
There is scarcely any remark to make on the parallel, oblique, and contrary motions; but the similar motion offers some difficulties, which it is necessary to be accustomed to vanquish early.

In the employment of this motion, the matter in question is dexterously to avoid making fifths or octaves in succession, both real and hidden, between any two parts whatever; but as this rule is liable to exceptions and as we are obliged to tolerate in practice a multitude of cases difficult to explain, without a previous notion regarding accidental notes and broken chords, we have thought it necessary to devote an article especially to this matter, placed in the second part of this work.

It is sufficient here that learners avoid making two real fifths or octaves in succession, by similar motion; and with regard to hidden fifths and octaves, that they allow themselves the following cases only:



(26) These hidden 5ths and 8ths would become real, if the under part of these examples proceeded by conjunct instead of by disjunct degrees [or alphabetically instead of by skips.]





It is well understood that this manner of writing can be employed but rarely: the harmony must be favorable to it. These are effects belonging to instruments and scarcely to be used in composing for voices; meanwhile these are modifications in the connection of chords which it is well to point out.

HERE FOLLOW THE DIFFERENT COMBINATIONS
IN RELATION TO THE MOTIONS OF THE PARTS.

1st with three parts.

- A.* Two parts form the parallel motion, the third part proceeding at pleasure.
- B.* One part remains on the same degree, the two others proceeding by similar or contrary motion.
- C.* The three parts proceed together, one in contrary motion and the other two in similar motion.

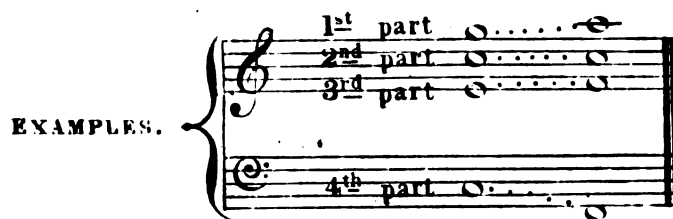
N.B. The three parts cannot proceed at the same time in similar motion, excepting in a succession of sixths:



2^d with four parts.

- A.* Three parts make the parallel motion, while the fourth rises or falls.
- B.* Two parts proceed in parallel motion, the other two proceeding by similar or contrary motion.
- C.* One part continues on the same degree, two others proceed by similar motion, and the fourth goes in contrary motion.
- D.* The four parts move at the same time, and in this case all the motions may take place simultaneously.

In changing a chord, the parts must necessarily make some motion in respect to each other, and it is in this case that three motions may take place at the same time.



The first makes the similar motion with the third; these two parts make the contrary motion with the fourth; and these three parts make the oblique motion with the second part.

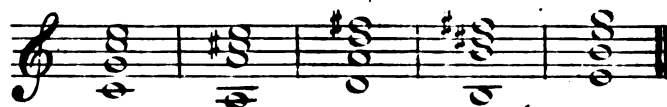
It happens that a note found in two different chords is often raised or lowered a semitone in the second chord. This alteration must be made in the same part, otherwise a *false relation* would be made, of which also we shall speak in the second part of this work. The rule that we have just given is sufficient here for writing lessons on the subjects to be proposed to learners: thus, it is necessary to proceed as follows:



If the note which is to be altered is doubled, it is then necessary to endeavour to make it single before the alteration, or else to make one of the notes fall a degree to the following chord, when that is practicable.



The following case is tolerated between the base only and a high part:

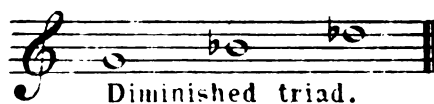


IV. ON THE PREPARATION AND RESOLUTION OF DISCORDS.

Of the thirteen chords of our classification [page 10] only the first two are concords; the others are, as we have already observed, more or less dissonant. It is to be remarked that frequently in a piece of music the number of discords greatly exceeds that of concords, without seeming harsh to the ear; yet, as the latter are much more agreeable, both sorts of chords must be employed with discrimination in order not to give a phrase a contrary character to that first proposed.

The art of harmony chiefly consists in knowing how to treat the discords properly; we shall, therefore, pass them all in review and point out, in regard to every one, what is indispensable to be known.

THIRD CHORD OF THE CLASSIFICATION.



- 1st It is found on the second degree of a minor scale.
 2nd It does not require preparation: although a discord, it is very soft.
 3rd It is always resolved on a perfect triad, or on a chord of dominant seventh, the radical base of which falls a fifth. The diminished [or imperfect] triad above is resolved on the major triad of C, or on the dominant seventh C, E, G, B \flat . (27)
 In cadences, it may be resolved on the second inversion of the tonic—here on C, F, A \flat .
 4th In a major scale, it is found on the seventh degree, and can be employed only in regular progressions. (28)
 5th One of its uses is to modulate (29) to the fourth below of a minor key: for example, the diminished chord above serves to modulate from B \flat minor into F minor. It may be used not inverted and in its first—seldom in its second—inversion.

Here is an example in which this chord is employed in the cases abovementioned.

The use of the diminished triad is marked every where by a cross. (+)

In F Minor.

Form of perfect cadence.

Form of half cadence.

Regular progression in A \flat .

Regular progression.

In B \flat minor.

Modulation from B \flat minor into F minor.

The musical examples are written in grand staff notation (treble and bass clefs). The first example, 'In F Minor', shows a perfect cadence (C4-E4-G4) and a half cadence (C4-E4-G4). The second example, 'Form of half cadence', shows a half cadence (C4-E4-G4). The third example, 'Regular progression in A-flat', shows a regular progression (A-flat4-C5-E5-G5). The fourth example, 'Regular progression', shows a regular progression (C4-E4-G4). The fifth example, 'In B-flat minor', shows a modulation from B-flat minor into F minor, with the diminished triad marked with a cross (+).

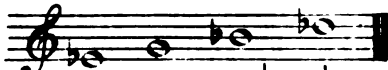
(27) It is well to observe that the author, when he names a chord followed by a resolution, understands at the same time all its inversions, these requiring in every case a regular resolution like that employed in the original chord. — C.

(28) In a regular progression, the radical base falls a third, fourth, or fifth, or else alternates regularly with two of these three cases. — R.

(29) See, page 53 the definition of this word. — R.



Learners will do well to transpose this example into all the minor keys, in order that they may be more thoroughly acquainted with the true use of the diminished triad.

Care must be taken not to confound this chord with that of the dominant seventh with the root ($E\flat$) omitted:  for the latter resolves on the perfect triad of $A\flat$. When the chord $G, B\flat, D\flat$ is derived from the dominant seventh, we shall find ourselves infallibly in $A\flat$, and not in F minor: in this case, $E\flat$ may always be added. This would be impracticable when $G, B\flat, D\flat$ formed a diminished chord, as in the preceding example.

FIFTH CHORD OF THE CLASSIFICATION. ⁽³¹⁾



1. This chord plays the most important part in music.
It is the softest of the discords, *after the diminished triad*.
It determines the key in the most undoubted manner.
It does not require preparation.
2. Its natural resolution is made in the following way:



The third, B , rises one degree [or letter.]

The fifth, D , rises or falls one degree.

The seventh, F , falls one degree.

The root, G , falls a fifth or rises a fourth, when it is in the base: when it is in a high part, it commonly remains on the same degree as a note common to both chords.

(30) It is well to prepare the fourth ($D\flat, G$) in this chord although dissonant, on account of its analogy with the perfect chords. — *R.*

(31) The fourth chord, being an altered chord, will be explained at the same time as the other chords of that kind. see page 48. — *R.*

3. The inversions of this discord follow the same principles.

EXAMPLE.

1st Inversion. 2nd Inversion. 3rd Inversion.

In the second inversion, it must not be forgotten to prepare the fourth, as we have already mentioned. In the case wherein this preparation cannot be made, the root of the chord must be omitted, and the F or D doubled: this modification gives the following resolution:

The doubled note may rise or fall.

1. 2. 3.

In the last two cases of the preceding example, the F may be made to ascend without evil consequence.

In three parts. In four parts, or.

The three preceding cases are the only ones (some broken cadences excepted) wherein the F can properly rise to its resolution when not doubled, the above examples being made legitimate through the omission of the root, G.

4. In employing the dominant seventh in three parts, its root, G, its third, B, or its fifth, D, may be omitted, but never the seventh, F.

EXAMPLES.

1. 2. 3.

Without the 5th Without the 3rd Without the root.

5. The dominant seventh may always be employed in the last chord but one, in perfect cadences.

6. In broken cadences, its resolution varies according to the chord on which it is desired to break the cadence. We shall here give an example of all its different resolutions, which should be considered as so many exceptions.

1. 2. 3. 4. 5. 6.

7. 8. 9. 10. 11. 12.

Seldom. Seldom. Seldom.

In numbers 7, 8, 9, 11, and 12, the seventh is resolved by rising in an irregular way; but this resolution is sometimes tolerated when correct feeling suggests it for powerfully interrupting the natural progression of chords; moreover all these exceptions, producing a good effect in broken cadences, may also produce a very happy effect when properly introduced in the course of the phrases. In the latter case, they may be likewise employed in their inversions.

In the use of these exceptions it is very essential to retain the sounds in the greatest possible proximity. Without this precaution, all the good effect which might be obtained from them would infallibly be destroyed, through the want of connection between the chords. This great nearness is the only condition of the employment of these broken cadences.⁽³²⁾

(32) It is advantageous to practise modulation by the dominant seventh, into all keys, as follows:

1. By the dominant Seventh. &c. through the 24 keys to C again.

2. By the first inversion, or chord of 6.

3. By the second inversion, or chord of the third, fourth and sixth. &c.

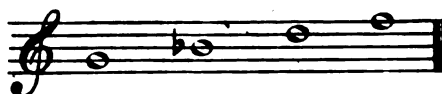
4. By the third inversion, or chord of the second.

And so on, in every position of every inversion likewise.

SIXTH CHORD OF THE CLASSIFICATION.

39

Seventh of the second species.



1. This chord is principally used on the second degree of a major scale. (33)
2. It must be prepared, that is to say, the seventh, F, [which is the discordant note] must be prepared.
3. It is resolved regularly, on the perfect triad of the fifth below, or on the dominant seventh on the same fifth below.

EXAMPLES IN F MAJOR.

Preparation. Discordant.		Resolution.		Preparation. Discordant.		Resolution on the dominant 7 th		Final resolution.	
note				note					
7 th of the 2 nd kind.		Half cadence.		7 th of the 2 nd kind.				Perfect cadence.	

By the above examples it is seen that in order to employ this seventh there must be a succession of four or at least three chords.

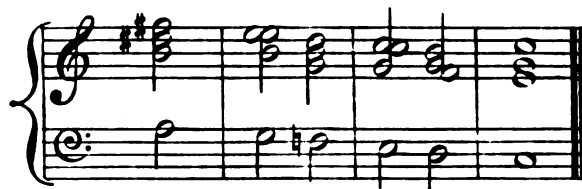
4. It is employed in all its inversions.

We shall here give examples of the resolutions of this chord and of some of its practicable exceptions.

1.	2.	3.	4.
		In its 1 st inversion	In its 1 st inversion
		+	+

Formula of perfect cadence. Form of half cadence. Form of perfect cadence.

N.B. Since the third inversion (chord of the second) cannot be resolved immediately on the tonic harmony but only in its first inversion, a chord of third and fourth is required in order to conclude, namely -



In general the young composer must make his ear and (so far as he is a pianoforte-player) his fingers as familiar as possible with the nature and effects of *all chords*. - C.

(33) It is found likewise on the third and sixth degrees of the same scale. - R.

5. + 6.

In its 2nd inversion.

In its 3rd inversion.

In this second inversion (which is used more rarely than the others) care must also be taken to prepare the perfect 4th occurring between the base and a high part.

1. 2. 3.

EXCEPTIONS

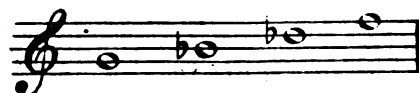
half cadence

perfect cadence

half cadence

SEVENTH CHORD OF THE CLASSIFICATION.

The seventh of the third kind.



This discord is usually placed on the second degree of a minor scale, and is employed in the minor keys under the same condition as the preceding chord in the major keys. These two discords follow exactly the same principles. Hence, by transposing the preceding examples from *F major* into *F minor*, a pattern will be obtained of all the cases practised in using the seventh of the third species.

THE SAME EXAMPLES IN F MINOR.

1. + 2. 3. +

Preparing chord.

Seventh of the 3rd kind

In its first inversion.

Form of perfect cadence. Form of half cadence. Perfect cadence.

4. + 5. + 6.

In its 1st inversion

In its 2nd inversion

In its 3rd inversion

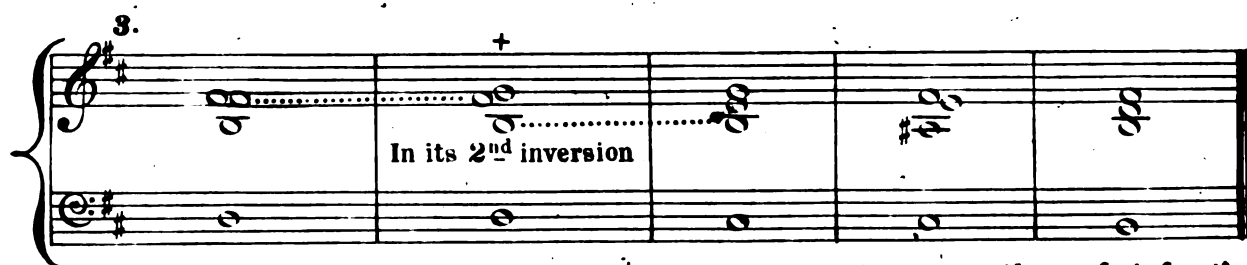
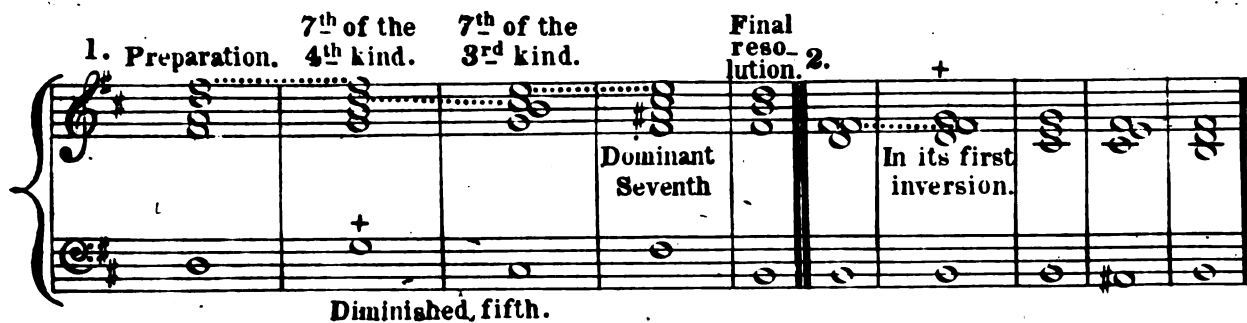


EIGHTH CHORD OF THE CLASSIFICATION.

Seventh of the fourth species. 

1. It is usually employed on the sixth degree of a minor scale, or on the fourth degree of a major scale.
2. The seventh in this chord must be prepared.
3. It is most frequently resolved on a chord of the seventh of the third species: in this case, the root makes a diminished fifth with the root of the following chord, and the conclusion is made by the perfect minor triad.
4. It is used in all its inversions.

A series of chords necessary for employing the seventh of the fourth species.



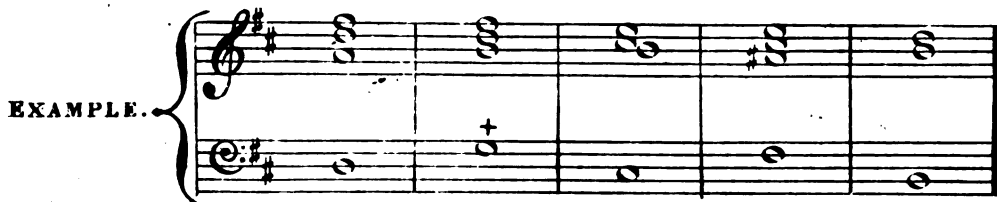
In this inversion, seldom used, care must likewise be taken to prepare the perfect fourth, D, G, formed by the base and a high part.



Resolution equally good.

In numbers 1 and 5, the modulation is necessarily made from D to B. In this series, we go from the seventh of the fourth kind (the most dissonant chord) to the seventh of the third kind, which is less discordant, and so downwards (diminishing in discordancy) to the perfect triad. In this gradation lies the beauty of this series.

In number 1, of the preceding examples, we have written the harmony in five parts, to the end that every chord might be complete. In order to make it in four parts, the fifth of the third and the fifth chords is omitted.



In the same number 1, we have begun the series by the major triad of D, (although it is to terminate in B minor) because this chord better prepares the above seventh of the fourth species, when the latter is not inverted.

It may be remarked also in this example, in which not one of the chords is inverted, that the radical base proceeds by fifths downwards (especially starting from the seventh of the fourth kind:) this condition is indispensable for employing this series of chords.

Sometimes the seventh in the third chord of this series may be omitted and the seventh of the fourth species may be resolved on the diminished triad on its fifth below, as shewn in N° 5. of the preceding examples. This chord is resolved likewise (but much more rarely) on the major triad of the fifth below, and even on another seventh of the fourth kind, also on the fifth below; but, in both these cases, the fifth below should be perfect, as will be seen in the following article.

Before proceeding to the chords of the ninth, we shall here show how the succession of chords is formed called a *sequence of sevenths*.

ON SUCCESSIONS OF SEVENTHS.

Here follows an example which we shall analyse immediately.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
--	----	----	----	----	----	----	----	----	----

In C Major. In 5 parts. Final resolution.

Dominant 7th 4th kind of 7th ditto 3rd kind of 7th 2nd kind of 7th 2nd kind of 7th ditto Dominant 7th Tonic.

The same example in four parts.

The same example in three parts.

In C Major. Dominant. Tonic.

1. The discord commencing this sequence is the dominant seventh which has no need to be prepared. A sequence of sevenths might begin by a chord of the seventh, of the second, third, or fourth species; but then the first discord must be prepared.
2. The last discord of this sequence must always be the dominant seventh.
3. The roots of the chords fall a fifth. This condition is inviolable.
4. The parts fall by conjunct degrees till the final resolution, excepting the base, when the chords are not inverted. It is obvious in this sequence that the third in one chord becomes the seventh in that which follows, and that by this note common to both chords, the discordant note is always found to be prepared. Thus, the first chord prepares the second, the second prepares the third, and so on to the end.
5. All the chords of this example are composed of notes belonging to one and the same scale (that of C major). This condition is likewise indispensable in the use of these progressions; however the fifth chord might have been made into a chord of the dominant seventh (by prefixing a sharp to the G) and terminating the progression in A minor; or, in like manner, the seventh chord might have been made into a chord of dominant seventh (by prefixing a sharp to F) and terminating the progression in G major: this might have been done, because the keys of A minor and G major are relatives to the key of C. (34)
6. This sequence has still further this in particular, that two chords of the seventh of the fourth species may succeed each other in it, without fault, as well as two or three of the second species.

These sequences may also take place in their inversions; but as all the chords of the succession cannot be found at the same time in the same inversion, the designation whether of the first, second, or third inversion is understood according to the first chord inverted.

EXAMPLES.

Nº 1. Good and very much used.

Nº 2. Good and very much used.

1st Inversion 3rd 1st 3rd 1st 3rd 1st 3rd 1st 3rd invers: 3rd inv: 1st 3rd 1st 3rd 1st 3rd 1st inv: Tonic

Feeble and little used, on account of the frequent fourths (although prepared) between the base and a high part.

Nº 3.

Nº 4. Feeble and little used for the same reason.

Direct 2nd dir 2nd dir 2nd dir 2nd inv: dir: 2nd inv: dir: 2nd dir: 2nd dir: 2nd direct

(34) See, in the article on Modulation, what is meant by a relative key, page 60. R.

In the first two examples preceding, the first inversion alternates with the third; and in the last two examples, the direct (or uninverted) chord alternates with the second inversion. The sequences of sevenths are sometimes very short: four or five chords may be sufficient to form one, that which we have given as an example is nearly the longest that can be employed.

They may equally take place in minor keys; but it is well to observe that, in the course of these sequences, the sixth and seventh notes of the scale must never be raised by accidentals. The steps of the seventh are made in minor as in major without any alteration, excepting the last discord, which must always be the dominant seventh.

EXAMPLE.

In A minor. In A minor.

Tonic.

Thus, that succession of chords (in A minor) is made as if it were in C major. What determines the mode to which it should belong is the manner of ending it. In the above examples, it is seen that we have altered the last chord but one, (by the G sharp) in order to form a dominant seventh in A minor to conclude in that key, supposed to be already determined by what precedes.

A succession may also be made of three or four chords of dominant sevenths, the roots of which proceed in like manner by falling a fifth. This succession may likewise be employed in the different inversions.

EXAMPLES.

Good Good Good

Direct (not inverted) 1st inv: 3rd 1st inv: 3rd 3rd inv: 1st 3rd 1st

Less good Less good

Direct. 2nd inv: direct. 2nd inv: 2nd inv: direct. 2nd inv: direct.

In this progression it is evident; first, that two parts descend chromatically, and two diatonically; secondly, that the seventh in these discords is not prepared, because these are always chords of dominant sevenths.

It must be observed further that a succession of chords by falling fifths may give the three following changes: 1st the chords may all consist of three sounds only (the major, minor, and diminished triads;) 2^d the chords may all be discords of the seventh; 3^d the discords of the seventh may alternate with triads. We have given examples of the second variety: the following are examples of the first and third.

EXAMPLES.

1. Perfect triads.

2. Chords of the 7th and triads.

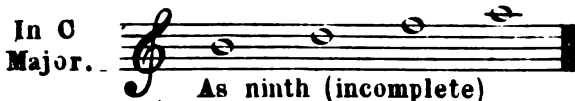
3. or ditto.



NINTH CHORD OF THE CLASSIFICATION.

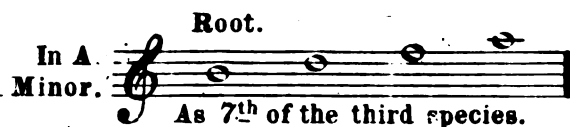


It is placed on the dominant of a well determined major key, but is used almost always without its root (G in this example): the remaining notes resemble a chord of the seventh of the third species, with which great care must be taken not to confound it. In order to prevent every mistake of this kind, we shall give here a comparative table of both chords.



As ninth (incomplete)

1. It is not prepared.
2. It is resolved on the chord of the tonic. Its root, which is understood, is G.
3. Its employment does not require a series of chords.
4. The ninth, A, can be placed only above B, consequently cannot be placed in the base.
5. The ninth, A, may, without inconvenience to the progress of the chords, be replaced by G, changing the chord into a dominant seventh.



As 7th of the third species.

1. It must be prepared.
2. It is resolved on the chord of the fifth below (namely the dominant of A.) Its root is B.
3. It requires a series of three chords at least.
4. The A, as well as all the other notes, may be placed in the base, as well as in the upper parts.
5. The A in this chord cannot be changed for G, without affecting the connection of the harmony.

Its resolution is made in the following way:



It must be remarked that two parts should rise and the other two parts should fall. It may be used in different inversions.

Here follow examples of the way in which they are employed.

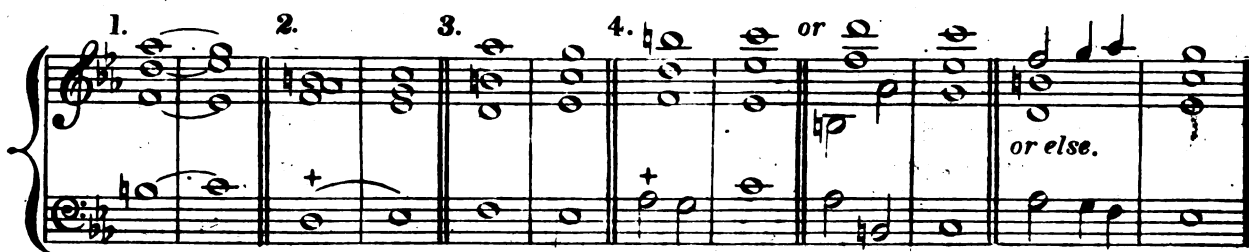


TENTH CHORD OF THE CLASSIFICATION.



This chord is used almost always without its root, and, in this case, is called the chord of the *diminished seventh*; consequently this latter chord is nothing else than the discord of the minor ninth without its root; and for this reason does not occupy a particular place in the classification of chords.

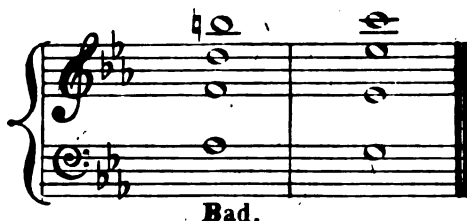
1. It is placed most frequently in minor keys; but is sometimes made use of in major keys likewise.
2. Every note of this chord may be put as a base note.
3. It does not require to be prepared.
4. Its resolution is made (regularly) in the following manner:



(35) We have employed it here with its root. In this case it is necessary, as here shown, to place the root, G, at the distance of a ninth, or of a double ninth, from A. The F may be put in the base, as in this example. This chord may be also used without inversion and complete.



In number 4 of these examples, the base cannot resolve as follows:



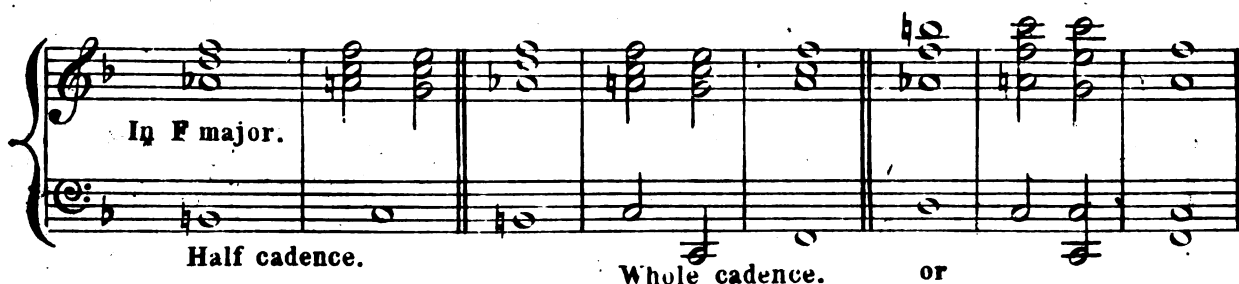
Bad.

because the second chord would be found in its second inversion, and the base would form an unprepared perfect fourth. It is for this reason that, in employing this inversion, one of the three cases of N^o 4. should be chosen. The D may also descend to the resolution, when it is found above the Ab.

The diminished seventh is frequently resolved, in cadences, on the second inversion of the triad of the tonic; in the following way:



Employment of this seventh in a major key.



A sequence of three or four chords of the diminished seventh may also be used.



The discord of the minor ninth may also be employed with its five notes; but in this case the root should be in the base and the ninth distant from it by at least the interval of a ninth.



It is only in the minor key that the chord of the minor ninth can be used with its five notes, and only on the dominant of the key.

FOURTH CHORD OF THE CLASSIFICATION OR FIRST ALTERED CHORD.

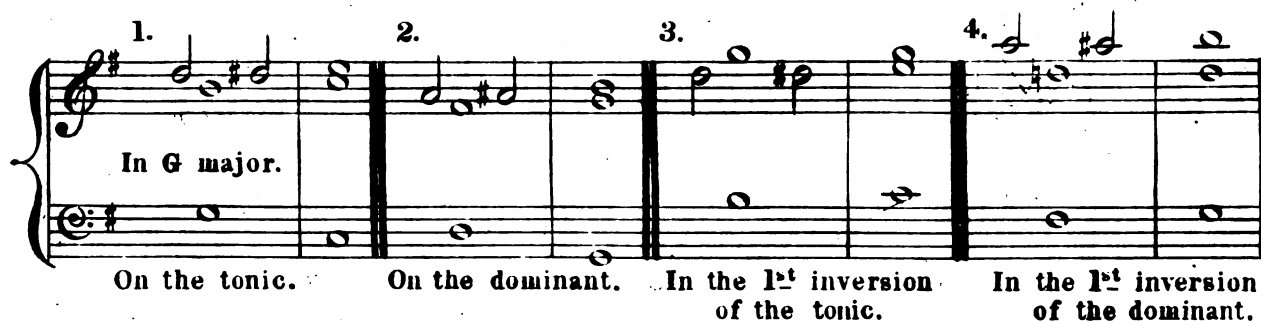
Chord of the augmented fifth.



This chord is nothing but the major triad, made dissonant by raising its fifth a semitone.

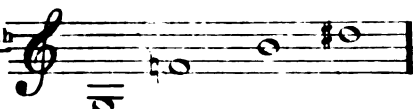
1. It is employed on the tonic and on the dominant of a well determined major key.³⁶
2. It may be struck without preparation; but is much less harsh when preceded by the major triad unaltered.
3. It may take place uninverted and in both its inversions.
4. Its resolution is commonly made on the major triad of its fifth below.

Here follow some examples:



(36) The scales have a great influence on the chords: some would be impracticable, if the key were not previously well determined. This remark is important, inasmuch as it shews why a chord produces a good effect in one case and makes a bad impression in another. - R.

**THIRTEENTH CHORD OF THE CLASSIFICATION
OR SECOND ALTERED CHORD⁽³⁷⁾**

Chord of the augmented 5th with the 7th 

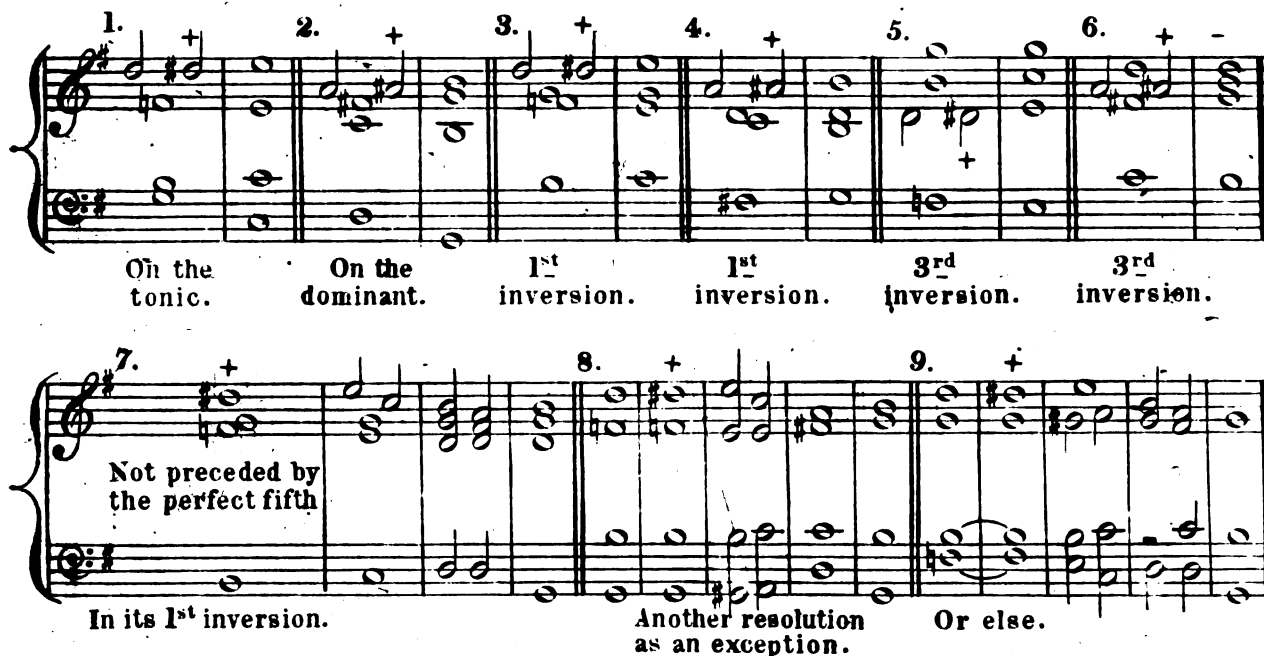
This discord is nothing else than the dominant seventh wherein the fifth is altered a semitone. It is employed under nearly the same conditions as the preceding chord.

1. It takes place on the tonic or on the dominant of a well determined major key.
2. It may be struck without preparation; but it is less harsh when the augmented fifth is preceded by the perfect fifth.
3. It may be used uninverted and in its first and third inversions.

The second inversion is not usable, because the F and D sharp must always make an augmented sixth, and not a diminished third, an interval which is not admitted in harmony. It is therefore evident that the D sharp cannot be placed below F and consequently not in the base.

4. It is usually resolved on the major triad of its fifth below.

EXAMPLES in G MAJOR.

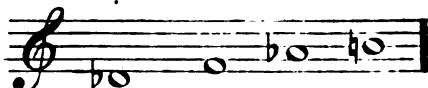


1. On the tonic. 2. On the dominant. 3. 1st inversion. 4. 1st inversion. 5. 3rd inversion. 6. 3rd inversion.

7. Not preceded by the perfect fifth. 8. In its 1st inversion. 9. Another resolution as an exception. Or else.

ELEVENTH CHORD OF THE CLASSIFICATION OR THIRD ALTERED CHORD.


Chord of the augmented sixth:





We have shewn, before, the origin of this chord (see the article on the fundamental or radical base, p. 12)


(37) This chord, being a compound of the preceding chord, naturally finds its place here. - R.


1. This chord is used for making a half cadence on the dominant of a minor key, and sometimes of a major key. It is employed also in perfect cadences, but always on the sixth degree of the scale.
2. It does not require preparation.
3. Frequently the fifth (A flat) is omitted, and then the third, F, is doubled.⁽³⁸⁾
4. The resolution is made in the following manner:

1.  Half cadence.

2.  or, good also.

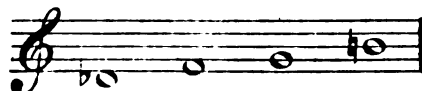
3.  Practicable, but rarely, in this version.

4.  Minor perfect cadence.

5.  Major perfect cadence.


TWELFTH CHORD OF THE CLASSIFICATION, OR FOURTH ALTERED CHORD.

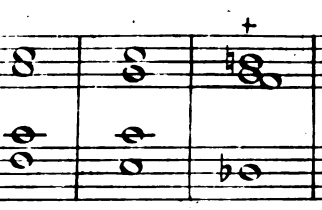
Chord of augmented fourth and sixth.




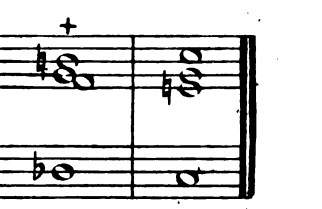
This chord has always a harsh effect, if care be not taken to prepare the fourth. It is made use of in forming a half cadence. It is used in the following way:

EXAMPLES.

1.  Preparation of the 4th. Half cadence.

2.  or, Preparation of the 4th. Half cadence.

3.  or Half cadence

4.  or Half cadence

(38) This is seen particularly when it is resolved into the perfect triad, because two open perfect fifths occur:

 In 3 parts.

When it is resolved into the second inversion of the triad (the chord of the fourth and sixth,) the fifth is necessary:

 c.

It is to be remarked that, of all the chords of the classification, there are only the sevenths of the second, third, and fourth species that strictly require preparation.

OBSERVATIONS

ON THE NOTES WHICH MAY BE DOUBLED OR OMITTED IN CHORDS.

It is indifferent to double any note whatever in the perfect triads: 1st, at the beginning of a piece; 2^{dly}, in the last chord of a perfect cadence— and sometimes of a half cadence; 3^{dly}, at the commencement of a new period.

In the course of phrases, the third of the major triad cannot often be doubled: this is the case when the third, becoming a *leading-note in the following chord*, requires a determined resolution. The chord to which it belongs may be regarded as a dominant seventh, and may become so in fact if desired.

EXAMPLE.

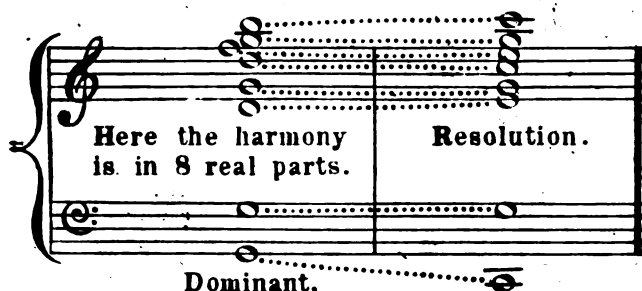
The thirds of all the triads marked by a cross (+) in this example cannot be doubled, because they are so many leading-notes which are to ascend a semitone to be resolved. By disregarding this remark, a double resolution would take place, and, consequently, two forbidden octaves: or, in order to avoid these two octaves, we should be compelled to give a bad resolution to the parts, and this must equally be avoided.

The fifth in the perfect triads may be omitted, but seldom the root or the third. The same principles are observed in regard to the diminished triad: its fifth may be doubled (although discordant) or may be omitted. With respect to the other discords (from the fourth to the thirteenth of the classification,) there is a general rule which forbids doubling the discordant notes, as well as all those which have but one way of being resolved, for the reason before mentioned. (39)

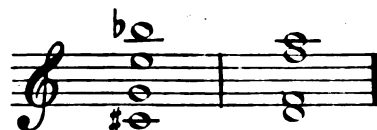
Thus in the chord of the dominant seventh, neither the seventh nor the third is doubled, because these two notes have but one way of being resolved; but the fifth may be doubled, because it may be resolved either by rising or falling. The root likewise may be doubled, tripled, and even quadruplicated, because it may, during the resolution, continue in its place as a note common to both chords.

(39) Hereafter will be seen the exceptions allowed in writing for the orchestra. — R.

EXAMPLE.
In C Major.



In the chord of the diminished seventh:



by placing,

as here, the B flat in the upper part, no note can be doubled, because the four notes composing the chord have only one way of being resolved; but by putting the B flat in a middle part and below E, the E may be doubled, because this note is, in this case, capable of a double resolution.

EXAMPLE.

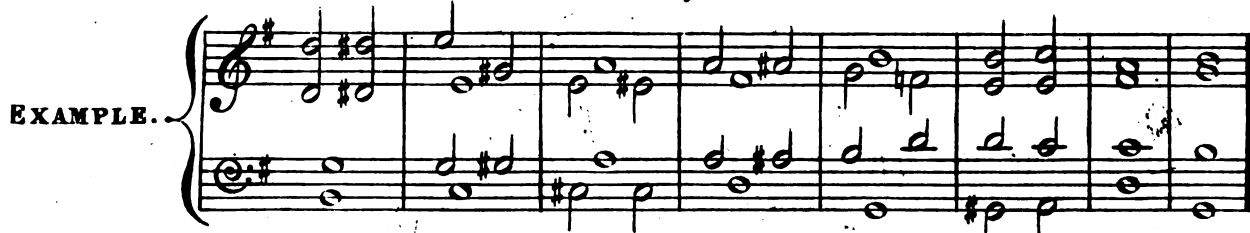


The harmony is here in five real

parts. According to these remarks, it is easy for the student to comprehend and to find out by himself which notes admit of being doubled in any chord whatever.

It is sometimes allowed to make two parts proceed in octaves: this kind of licence is tolerated, because experience has proved that it may produce effect.

Octaves used in the free style ⁽⁴⁰⁾



These are not looked upon as forbidden octaves, but as an intention of the composer; however they are only to be found between two upper parts and never between an upper part and the base.

When a note of a chord is omitted, care must be taken that it be not that note by which the chord is distinguished and the absence whereof might occasion that chord to be confounded with some other.

If, for instance, the G in the following example:



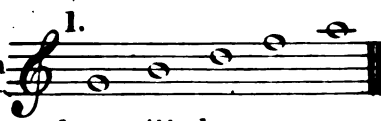
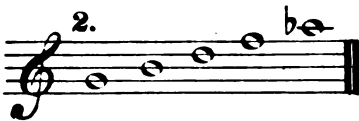
were omitted, the chord could not be distinguished from the major triad of B flat. If the F were omitted, the chord would be confounded with the minor triad of G. Hence it is D, the fifth in the chord, which must be omitted.

(40) We shall give, further on, an explanation of the difference between the free and the strict style in music - R.

EXAMPLE.



This rule is applicable to nearly all chords. In chords of the ninth, two notes are omitted — the root and the fifth.

Thus from  and from  the G and the D may be omitted.

EXAMPLE



From the discord of the augmented sixth, as we have already observed, the fifth is omitted. These remarks are particularly applicable to discords. In regard to perfect triads the rule is less strict: first, because the discord which precedes a perfect triad determines its nature; secondly, because the chords of the dominant and of the tonic, in a determined scale, so well possess our ear that they are known by the least indication.

EXAMPLE.



The dominant seventh of No 1. indicates undoubtedly that C E of the following chord belong to the major triad C, E, G. The two other examples excite the feeling of the tonic and dominant in the key of C in which they are. In modulating, it will be well to complete the chords as much as possible.

OF MODULATION,

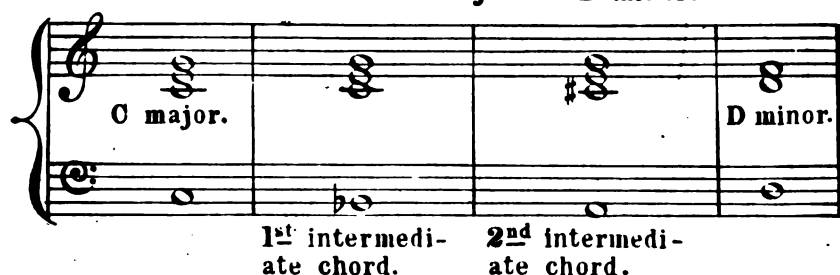
OR PASSING OUT OF ONE KEY INTO ANOTHER.

We have shewn how chords are linked together to produce harmony. It is now of importance to be acquainted with the chief method of connecting scales, or of modulating, for to modulate means nothing else than to connect, unite, or join together different scales or different keys in succession.

This method is very simple and consists in the choice of one or several chords, which are placed between the scales, and which, for that reason, we shall call *intermediate chords*.

From C major to D minor.

EXAMPLE.



There are keys which have so intimate a relation one to another that they are connected without intermediate chords. For example, we can go immediately —

1st, From C major into A minor, (a third below;)

2^{dly}, From C major into G major, (a fourth below;)

3^{dly}, From C major into F major, (a fifth below.)

By proceeding thus from one key into another, without intermediate chords, we do not precisely modulate, we only change the key; but, in the three cases above, an intermediate chord, which is always the dominant seventh of the key into which we intend to go, may be taken; and in this case we really modulate.

See the following example wherein the intermediate chord is marked with a cross.(+)

Going from a major key.

From C into A minor. From C into G major. From C into F major.

Going from a minor key.

From A minor into F major. From A minor into E minor. From A minor into D minor.

Two keys are relatives when they differ only by one accidental (# or b) more or less at the clef, as for instance, C major and G major; or C major and F major. They have consequently six notes in common.

Two keys are still relatives when the number of sharps or flats at the clef is the same, as for example C major and A minor, or D major and B minor; and both keys have all the notes in common, excepting the accidental alterations in the minor key, wherein the sixth and seventh notes of the scale are frequently raised.

RULE. Modulation into a relative key may be made by a single intermediate chord.

EXAMPLE

From C - into - - G.

This modulation may be permanent or only transient. It is permanent or determined, if the new key is continued during a certain time: it is transient only if quitted immediately; to modulate into a third key, &c. In both cases, we may proceed in the same way, namely, with the same intermediate chords.

The following is an example of transient modulations, where every key is relative to its antecedent key:

From C to A minor. From F to D minor. From A

C major. From A to F major. From D to A minor.

to E minor. From C to F major. From B \flat to

From E to C major. From F to B \flat major.

E \flat major. From C to A \flat major. From E \flat to B \flat major.

From E \flat to C minor. From A \flat to E \flat major. From B \flat

From F to D minor.

to F major. From D to C major.

All these modulations are made with a single intermediate chord which is the dominant seventh, used most frequently in one of its inversions. The following is a further example on the same subject, wherein the intermediate chords are major triads, instead of being dominant sevenths as in the example preceding.

From E minor to G major. From B to D major.

From G to B minor. From D to

From E to D major.

E minor. From D to E minor.

We have said previously that the key might be changed to the third, fourth, and fifth below, without intermediate chords. The following are all the changes which these three cases offer: *first*, to the third below— if the first key is major the second should be minor (from C major to A minor,) the change of key is consequently made to the minor third below; if, on the contrary, the first key is minor, the second should be major, for example, from C minor to A flat major, the change of key being then made to the major third below ⁽⁴¹⁾ *Secondly*, to the fourth below. Both keys should be major or both minor, otherwise they would not be relative keys. *Thirdly*, to the fifth below. Both keys should be major or both minor also for the same reason.

In order to change the key in this way, we should continue in the new key for some time, otherwise the chord only would be changed and not the scale. In the following example, it is quite evident that the same key is continued, because all the chords belong to the same scale and do not change from C to A, to F, to D, to G, &c.



In order to change the key in reality without intermediate chords it is necessary to make a whole phrase or period ⁽⁴²⁾ in the new key. Thus, for example, after a theme in C major, a period might be made in G major, in F major, or in A minor, returning afterward into the key of the theme [or original key.]

(41) A succession of chords through all the twenty-four keys, according to this relation, may be formed by direct triads, as follows:

C maj:	A min:	F maj:	D min:	B \flat maj:	G min:	E \flat maj:	C min:	A \flat maj:	F min:	D \flat maj:	B \flat min:
G \flat maj:	E \flat min:	B maj:	G \sharp min:	E maj:	C \sharp min:	A maj:	F \sharp min:	D maj:	B min:	G maj:	E min:
C maj:	A min:	F maj:	D min:	B \flat maj:	G min:	E \flat maj:	C min:	A \flat maj:	F min:	D \flat maj:	B \flat min:

Many modulations for further practice may be continued through all keys, in this order or also in the contrary, from C major to E minor, G major to B minor, &c. — C.

(42) We call a period a musical phrase which ends with a perfect cadence, and this supposes a certain duration. All other phrases which do not end with a perfect cadence are only subdivisions of members of a period. — R.

The key is likewise changed, but much more rarely, to the major second above and to the minor third above, without intermediate chords:

1. To the major second above, the first key ought to be major and the second key minor.

EXAMPLE

In C major.

Half cadence.

Dominant.

In this case, we cannot continue long in the second key, (D minor;) it is necessary to return into C, or modulate into some other key.

2. To the minor third above, the first key can only be minor and the second key is always major.

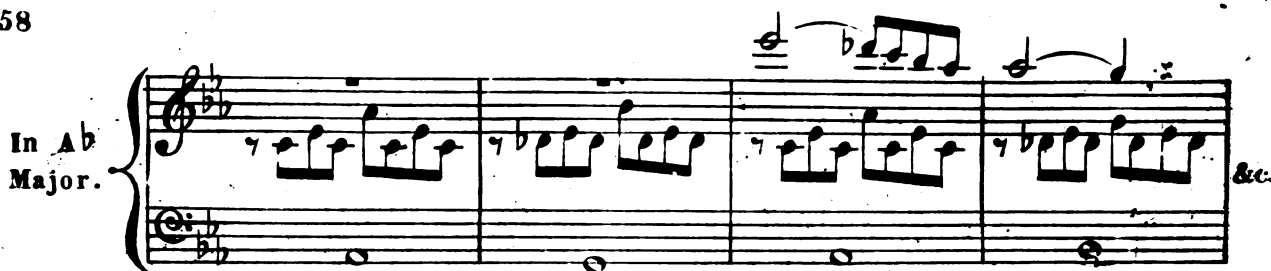
This last change of key is practised only when a first period ends in the minor (as in A minor;) then the second key begins in the major, its relative key (C major,) which is done principally in the Rondo.

A third connection of this kind is further made by changing the mode without changing the key; for example, from C major to C minor, or else from C minor to C major.

We might likewise go immediately from C major into F minor, although these two keys are not relatives, because the major chord of C may be considered as the dominant of F. In like manner, immediately after a perfect major triad (that of G for example) the key of its minor second above (A flat) may be taken; but the major triad of G must be the dominant of C minor: in this case we modulate from C minor into A flat major, a relative key, and not from G major into A flat major, keys which have no relation.

In C minor.

(43) The octaves and fifths which occur from the fourth to the fifth measure are tolerated for the reasons pointed out in the Second Part. (See the chapter on forbidden fifths and octaves, particular remarks, N°3.)



Thus the key is sometimes changed in an extraordinary manner, in order to produce a great contrast, for example, first, from the tonic of D major into E flat major; secondly, from the tonic of D major into B flat major. This can take place but once in a composition of a certain length, and when that violent transition can produce a real effect, as in a dramatic scene, an opera finale, a symphony, and in an overture.

In a finale, composed of different pieces, one piece may end in D major and the following may begin in E flat major. It is in this case especially that such a contrast may produce a great effect, because the theatrical situation not only admits but frequently requires it.

The first part of an allegro of a symphony may sometimes end in D major, and the second begin in B flat major. This unexpected opposition may still produce a happy effect when both parts have a great development.

Excepting these cases, the keys must always be connected by intermediate chords. The art of modulating well consists in the choice of these intermediate chords.

1. There are cases wherein a single intermediate chord (the dominant seventh) is sufficient.
2. Other cases wherein at least two chords are necessary.
3. Others wherein at least three are necessary.
4. Others wherein at least four must be used.

It must be remarked that scarcely any modulation exists which a skilful harmonist cannot effect with four intermediate chords.

EXAMPLES.

Modulation from E^b major into E^b major. Modulation from C major into F[♯] major.

With 4 intermediate chords. With 4 intermediate chords.

IMPORTANT REMARK ON THE DURATION OF THE INTERMEDIATE CHORDS.

As the intermediate chords are the only means of union between the different keys, it is of great importance to give the ear sufficient time to comprehend them well. A modulation, good in all other respects, might nevertheless seem harsh, extravagant, precipitate, and even bad, if the intermediate chords were of too short duration. This

(++) Each of these two chords represents enharmonically an *augmented sixth*, as will be seen further on. — R.

fault must be particularly avoided, when the object, in view is to connect two heterogeneous keys; nothing is ever risked by prolonging the duration of the intermediate chords. It is by means of this prolongation of the chords that Haydn has made modulations at once the most lovely and most extraordinary. (45)

Here follow two examples of a modulation made with the same intermediate chords; the first is good and the second bad.

1. 

Modulation from G major to B major sufficiently developed.

2. 

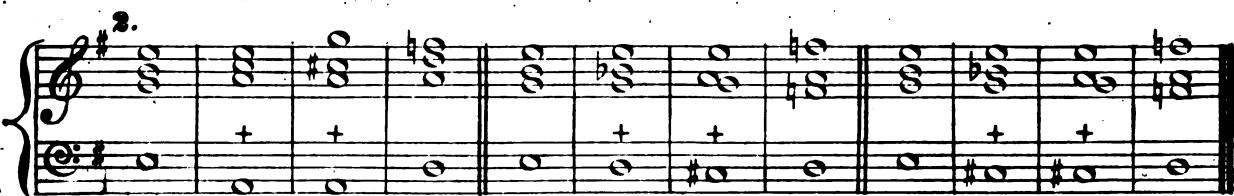
The same precipitated.

The modulations which require at least two intermediate chords are those wherein two scales are connected differing from each other by two accidentals (sharps or flats) at the clef, as D minor and E minor. (46)

1. 

From D minor into E minor.

Differently.

2. 

From E minor into D minor.

(45) Thus remains among others *Beethoven's Septett*, an imperishable model, how an extended work continually interesting, full of delightful melodies never growing old; in the circles of the simplest modulations, can, with a wise economy in practice, break forth in surprising effects. — C.

(46) Each of these two keys has but one accidental (# or b) at the clef; but, a flat being the opposite to a sharp, it follows that the difference between these two keys is really two accidentals. To be convinced of this, it is only necessary to transpose the modulation from D minor a tone higher, when the two keys will be E minor and F sharp minor, or else a tone lower, when they will be C minor and D minor. R.

3. From E minor to F major. A different way.

4. From F major to E minor. This modulation is already too abrupt.

5. Better with 8 intermediate chords. From F major to G major. Differently.

6. From G major to F major. Differently. Differently.

In order to employ these six modulations, certain conditions must be observed, without which they might become harsh and even bad. For this reason, it is important to point out the following system which the most celebrated composers have followed, from **PALESTRINA** to **SEBASTIAN BACH**, and which unfortunately has scarcely been mentioned in our days.

A regular piece of music is always composed in a fixed and determinate key: it begins and ends in this key, which must be remembered in the course of the piece. We will call it therefore the *original or principal key*. Every original key, major or minor, is as it were surrounded by five other keys having a great relation to it, and which we shall name relative keys. For example,

C major — Original key.
D minor, 1st relative key.
E minor, 2^d relative key.
F major, 3^d relative key.
G major, 4th relative key.
A minor, 5th relative key.

A minor — Original key.
C major, 1st relative key.
D minor, 2^d relative key.
E minor, 3^d relative key.
F major, 4th relative key.
G major, 5th relative key.

These six keys offer in their connection seven hundred and twenty arrangements or permutations.⁽⁴⁷⁾ It is obvious what a great variety of modulations may be obtained by them without removing far from the original key. By modulating from the original key to every one of its relatives, and from every relative key into its original, modulations are always made between

(47) As the reader may convince himself by the algebraical formula $N \cdot (N-1) \cdot (N-2) \cdot (N-3) \cdot (N-4) \cdot (N-5)$, in which $N=6$; [R] (or $1 \times 2 \times 3 \times 4 \times 5 \times 6 = 720$). — These mathematical characters are read thus: "Six multiplied by 6 less one, 5, 4, 3, 2, or 1; then multiplied by 6 less 2, or 4; &c. the dot, as well as \times denoting multiplication; and — minus or less." — M).

two keys that differ from each other by one accidental (# or b) only or which have an equal number of accidentals at the clef. Almost always, a single intermediate chord is sufficient in all these cases: rarely are two employed.

EXAMPLES.

C Major
Original key.

1. Modulation from the 1st to the 2nd degree of the scale. 2. Return to C. 3. Modulation from the 1st to the 3rd degree of the scale.

4. Return. 5. From the 1st to 4th. 6. Return. 7. From 1st to 5th.

8. Return. 9. From 1st to 6th. 10. Return.

C minor,
Original key.

1. From the 1st to the 3rd degree. 2. Return. 3. 1st to 4th degree.

4. Return. 5. From 1st to 5th. 6. Return. 7. From 1st to 6th.

8. Return. 9. From 1st to 7th. 10. Return to C.

Here are twenty modulations (ten for each original key,) fourteen of them with one intermediate chord, and six with two intermediate chords. Moreover these last six modulations may pretty frequently be made with one single chord.

It often happens that a modulation is made into a key which is not a relative to its antecedent key, although both may be so with regard to their original key; thus D minor and E minor are not relatives to each other, because they differ by two accidentals.

These modulations take place

1st When the original key is major.
 From the 2^d degree to the 3^d
 From the 3^d degree to the 4th
 From the 4th degree to the 5th
 From the 2^d degree to the 5th
 and vice versa.

2^{dly} When the original key is minor.
 From the 4th degree to the 5th
 From the 5th degree to the 6th
 From the 6th degree to the 7th
 From the 4th degree to the 7th
 and vice versa.

These can be made with two intermediate chords (marked +): seldom do they require three...

From C to D, from D to E, from E to F, from F

C Major the Original key.

to G, from G to A, from A to B, from B to C, from C to D, from D to E, from E to F, from F to G, from G to A, from A to B, from B to C.

Conclusion in C Major.

(48)

From C to E, from E to G, from G to A, from A to B, from B to C, from C to D, from D to E, from E to F, from F to G, from G to A, from A to B, from B to C.

C Minor the Original key.

(48) The *seventh*, D, in this chord, is not prepared. It may take place thus under two conditions: 1st the root of this chord must continue the same as the root of the preceding chord; 2^d this note, D, in proceeding from the root of the foregoing chord, must fall one degree (or letter) and be thus resolved. This rule is applicable to the four species of seventh. R. 9189

Ab, from Ab to Bb, from Bb to C, from C to .. Bb, from Bb to Ab, from Ab

to G, from G to F, from F to Eb, from Eb to C. Conclusion.

AN IMPORTANT REMARK ON THESE MODULATIONS.

In modulating into an irrelative key (as from G major into A major,) it is necessary to manage so that the two keys be connected with a common original key which has been already well determined, as in the preceding examples; for it is *only in this case* that such modulation can be properly employed. I can readily modulate from G major to F major with two intermediate chords, in a piece of music whereof the original key is C major or A minor; but I could not do so, if the original key were D major or E minor. Thus then what is good in one case might become bad in another; hence all the modulations that we have indicated above, from the second to the third degree, from the third to the fourth, &c. are conditional, and cannot be employed alike everywhere.

In order to reach freely a key more or less distant, two, three, or four modulations may be made instead of one: these we shall call *compound modulations*.

For example, to go from G into F, we shall make two modulations instead of one.

First modulation from G into A minor.

G major.

Second modulation from A minor into F major.

By this method we go from one relative key into the other; for G major and A minor are relatives, and A minor and F major are also relatives.

Here is another example of a compound modulation, for going into E major by setting out from C major.

From C major into A minor, from A minor into D, from D major into A, from A into E major.

We have said above that to a major key, the minor key of its fifth below might be made to succeed immediately, going from C major into F minor. Hence it follows that we may modulate into all the relative keys of F minor, going from C major.

Modulations from C major into the relative keys of F minor.

From C major into D \flat major. From C into E \flat major. From C into F min: From C into A \flat

Another way.

major. From C major into A \flat . From C maj: into B \flat min: From C major into C min:

On quitting C major, we may also modulate into all the relatives of C minor, because both keys are easily connected.

Modulations from C major into the relative keys of C minor.

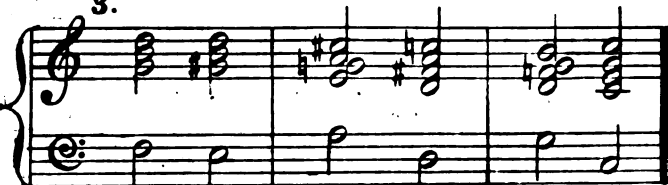
From C major into E \flat major. From C major into F minor. From C major into G minor.

From C major into A \flat major. From C into B \flat major. From C major into C minor.

The following example shews how a succession of dominant sevenths can be employed without quitting the relative keys.

1.  2. 

0 Major the original key. The same example otherwise inverted.

3. 

The same example wherein the intermediate chords are not inverted.

It is in this way (by continuing in the same key) that a succession of dominant sevenths produces the most pleasing effect. In the minor mode; only two dominant sevenths following could be employed if it were desired to continue in the key: with more we should quit the relative keys.

EXAMPLE.

A Minor the original key. 

or

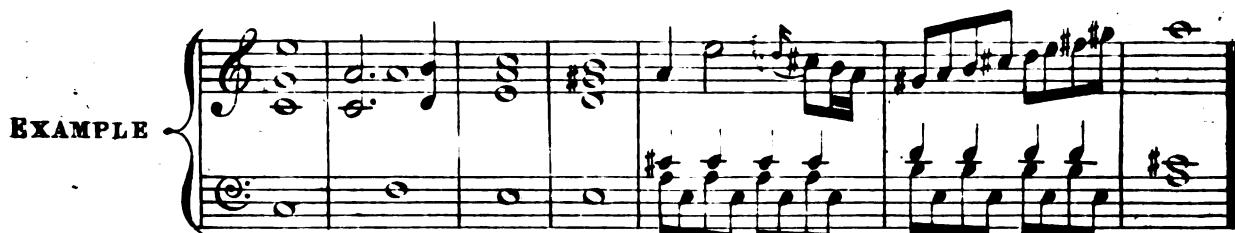
GENERAL REMARKS ON MODULATIONS.

1. Every modulation may be made in different ways, according to the taste or object of the composer, the nature of the melody accompanied &c: this difference consists in the choice only of the intermediate chords, and nothing will ever be risked by increasing the number of them or making compound modulations, when the melody permits. (49)
2. In a modulation requiring several intermediate chords, those which precede the dominant seventh should be selected so as to soften, prepare, and introduce that seventh freely.
3. There are pieces of music (the Fugue particularly) wherein it is not allowed to quit the original key and its five relatives. For this reason, we recommend to learners a great deal of practice in the modulations of which we have given examples above. They are in general extremely useful, because they may be employed everywhere without risk of going wrong.
4. It is easier to modulate into keys which increase in flats than into those which increase

(49) The author means that nothing is risked by the increase of the modulation in regard to the regularity. But it does not therefore follow, that the accompaniment of a melody, may be arbitrarily overloaded with useless, or disturbing modulations, without an object. — C.

in sharps: for instance, it is difficult to go without harshness from C major into A major,⁽⁵⁰⁾ whilst we go from C major into A flat major easily.

As the first of these two modulations might embarrass learners, we shall here give a pattern of it, being, as it is, one of the most delicate.



From C major into A major, with three intermediate chords.

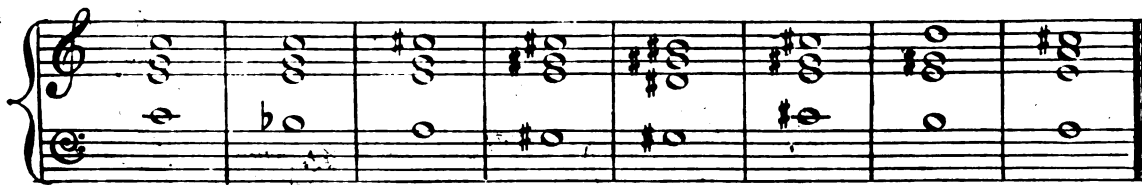
In this modulation it is seen, that the form of the perfect cadence must be made as if going into A minor, the last intermediate chord resolved on A major, and the intermediate chords must be sufficiently protracted. (51)

5. In going from one key into another, an organ-point is sometimes inserted, or else a long pause is made between the two keys. This silence, so placed, has a remarkable property—uniting two scales that have no appearance of connection. The longer this silence, the more agreeable is the change of key.

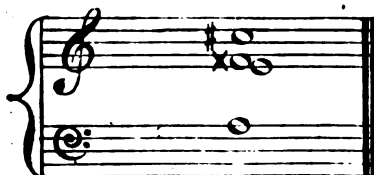
(50) See a very effective example of this modulation in Beethoven's last chorus in "The Mount of Olives." — M.



(51) The following form (for modulating from C major into A major) would be preferable; but it is necessary to employ the *enharmonic*, which we shall speak of hereafter:



The third chord must be changed into an augmented sixth, A, C♯, E, F double sharp.



It is in this change (G the 7th into F×) that the *enharmonic* consists in this example. — R.

EXAMPLE.

The silence here is a substitute for the intermediate chords.

6. The unison inserted between two very different keys has in like manner the effect of uniting them, without intermediate chords, especially when an organ-point is made there.

EXAMPLE.

Modulation from G minor to A flat major.

That unison is commonly, as above, the dominant of the following key: sometimes also, it is the tonic, as in this example. —

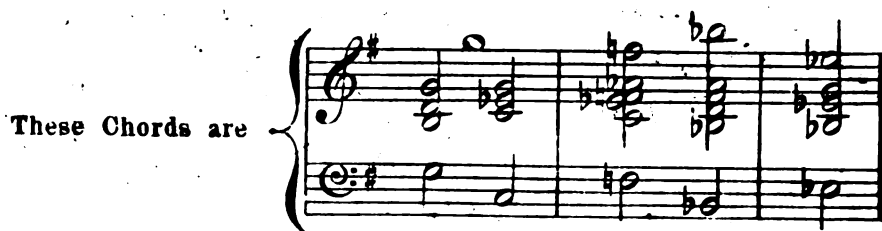
Modulation from E major into G sharp major:

A passage in unison may also become the means of uniting two distant scales.

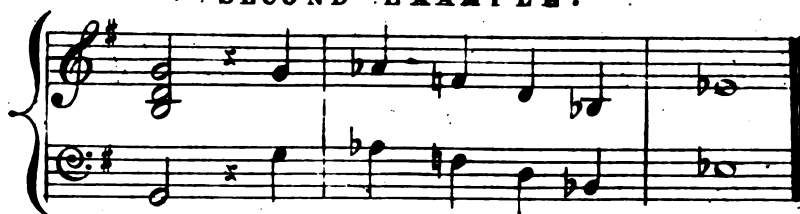
FIRST EXAMPLE.



The notes marked with a cross (+), in the preceding example, represent and occupy the place of the intermediate chords.



SECOND EXAMPLE.



7. A succession of chromatic notes performed by a single part which proceeds in an uncertain manner may likewise serve to unite two distant scales.

EXAMPLE.



Two very different scales are united also by interrupting a perfect cadence:



8. One cannot modulate and change the key incessantly; on the contrary it is necessary to stay frequently in one and the same scale, but while continuing the same key, little tran-

sient modulations may be employed into the relative keys to that in which it is intended to continue.

EXAMPLE.

In C major.

Transient modulation from C into D minor. Return. From C to F.

From F into G. Return into C. From C into A. Return into C major.

These transient modulations are so short, that the ear does not lose the impression of the key of C, and they have further the advantage of rendering a phrase of melody charming, which without them would be frequently common.

ANOTHER EXAMPLE IN A MINOR.

From F to D min. From A to C maj. Return to A minor.

Transient modulation from A minor into F major. From D to A minor. Return to A minor.

In order to continue a long while in the same key, especially without employing the little modulations just mentioned, it is necessary to interest by the melody and by suitable motions (*Figurierung*) in the parts of the accompaniment. By this method we may continue for a long time, not only in a single key, but also on a single chord. (52)

In the following example, the first seven measures continue in the major triad of G, the tonic.

(52) See, Part II, the article on the methods of varying the harmony without quitting the key.— R.

By employing all these means of connection in the modulations, it is necessary at the same time to consult the feeling and the ear. A modulation, although well made, may completely fail in effect when misplaced. There is no rule to give as to the proper employment of such or such modulations, the occasions on which they may be used with effect, or where they ought to be avoided, being too numerous.

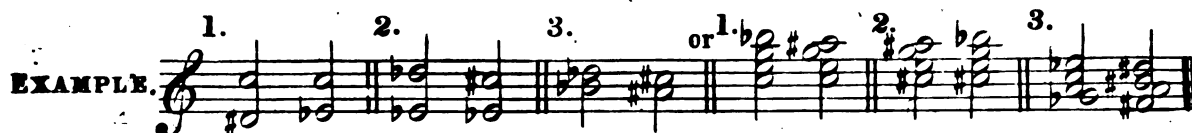
What we have said on the art of modulating, is what there is most instructive and most interesting. It remains for us to speak of enharmonic modulations only, the use of which is very limited.

OF ENHARMONIC MODULATIONS OR TRANSITIONS.

The word *Enharmonic* comes from the Greeks and signified with them, to proceed by a quarter of a tone. We shall call enharmonic the succession of two notes almost alike to the ear, but differently written and which can be produced only by one and the same finger-key of the organ and pianoforte.



Wherever a similar succession occurs, whether in intervals or in chords, there is consequently an enharmonic change, and it is sufficient, as in the fifth measure of the following example, that a single note undergoes this change in the chord.



By proceeding in that manner, in order to go out of one key into another, an enharmonic transition is made.



In N° 2. of the above examples, the second chord, marked + might be omitted, and the transition would be nevertheless enharmonic: it would then be necessary to suppose this second chord, in order to resolve the dominant seventh (C, E, G, B flat) immediately on the second inversion of the perfect triad (E, G, B.)

The chords which serve to make these transitions are: 1. The dominant seventh; 2. The chord of the augmented sixth; 3. The diminished seventh. On this account, these chords

(53) In nature, however, there is a real difference between these two notes, which is called a comma or diesis, and is expressed by the fraction $\frac{125}{128}$. But, in practice, one of these two notes is very often put in place of the other without sensibly affecting the ear. The same difference is found between D# and Eb, between F# and Gb, between E# and F#; and wherever two different notes are represented by one finger-key on the organ and on the pianoforte.— R. (54) See N° 7, page 72. — R. 9189

might be called *enharmonic discords*.

Every dominant seventh can be changed into a chord of the augmented sixth.

EXAMPLES. 1. 2. 3. 4.

Every chord of augmented sixth may consequently be changed into a dominant seventh.

EXAMPLES. 1. 2. 3. 4.

Every diminished seventh may be represented harmonically by three other diminished sevenths.

EXAMPLE. N^o 1.

These last four chords make but one upon the organ or pianoforte, because on these instruments they can be produced by the same finger-keys only: any one may be put in the place of the three others.

The same thing has place in the two following examples, N^o 2. and N^o 3:

EXAMPLES. N^o 2. N^o 3.

Hence it follows 1st, that an enharmonic transition can be made by changing the dominant seventh into a discord of the augmented sixth. In this case, the dominant seventh must not be inverted.

EXAMPLE. N^o 1.

In this example the change is real, (namely, in the written notes.)

In the following example, the change of the chord is only mental or supposed:

EXAMPLE. N^o 2.

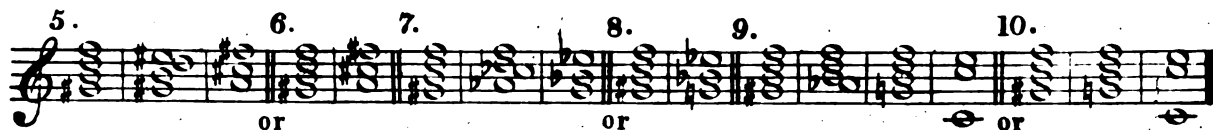
This affords an extraordinary modulation from A flat into G major.

2^{dly} That another enharmonic transition can be made by changing the augmented sixth into a dominant seventh. In this case, both chords must be direct, (not inverted:)

EXAMPLE. N^o 3. or N^o 4.

This produces a modulation from G, major or minor, into A flat major.

3^{dly} That three different enharmonic transitions can be made with a diminished seventh:



The whole secret of the real enharmonic transitions is included in these ten examples. (55)

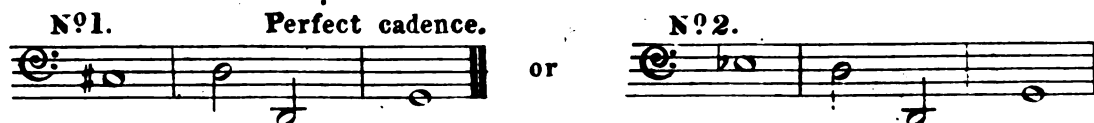
GENERAL FORMULA

BY MEANS OF WHICH ALL ENHARMONIC MODULATIONS CAN BE PRODUCED.

It is proposed to modulate into G, major or minor, (for the same formula can be used in both cases) from any key at pleasure.

In order to solve this problem, we take —

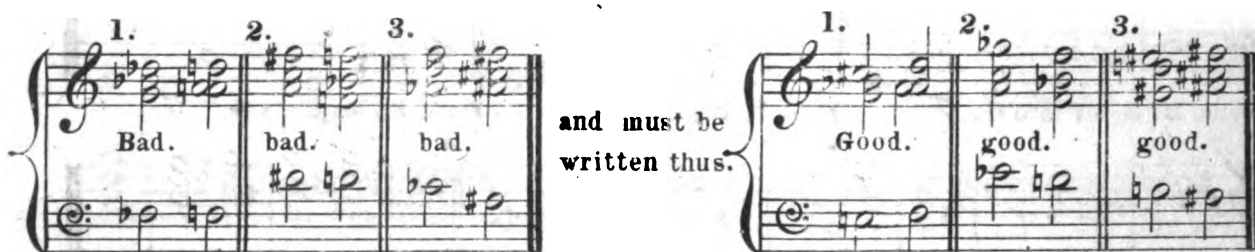
1st The four following notes in the base:



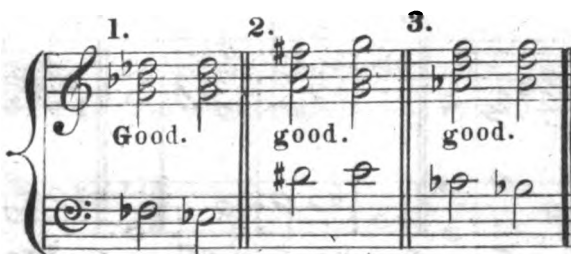
which in this part form the well known perfect cadence on G, major or minor.

2^{dly} On the first of these notes (in N° 1) we take a chord of diminished seventh, and, in N° 2, the chord of the augmented sixth: these will give the following chords:

(58) Besides, the composer must write the enharmonic chords suitably, as much as possible, to the key immediately succeeding; thus, for example, the following way of writing would be bad and irregular:



If it be desired to resolve correctly the first three enharmonic chords according to the way wherein they are written, the resolutions will appear as in the following examples:



In this manner, therefore, the musical orthography will always be maintained pure. — C.

N^o 1. N^o 2.

Perfect cadence on G. The same.

In both cases, the last three chords are always the same, excepting that the second and fourth chords are major when the modulation is into G major, and minor, if the modulation is into G minor.

Now there is nothing easier than to attain the first chord of these two examples enharmonically, in proceeding from any key whatever, as may be seen from the following table:

ENHARMONIC MODULATIONS,

for going into G from any key however distant, by means of the forms, N^o 1, and N^o 2:

N^o 1. N^o 2.

1. From A \flat minor into G.	2. From B \flat min: into G.	3. From D \flat maj: into G.
4. From D \flat minor into G.	5. From E maj: into G.	6. From F \sharp maj: into G.
7. From C \sharp major into G.	8. From B maj: into G.	9. From F min: into G.
10. From A \flat minor into G.	11. From B \flat min: into G.	12. From F \sharp min: into G.

The other modulations, as from C into G, D into G, A into G, &c. we have not inserted in this table, because they are made by the common methods, namely, without employing the enharmonic.

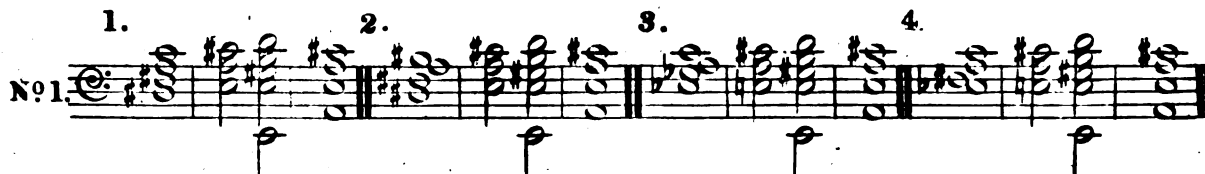
The eighth and eleventh examples do not require it. In order to conclude all these examples in G minor, we have only to take the antepenult chord minor instead of major.

When it is wished to modulate into A major, or into A minor, from any key at pleasure, the form of perfect cadence belonging to these two modes is to be taken:

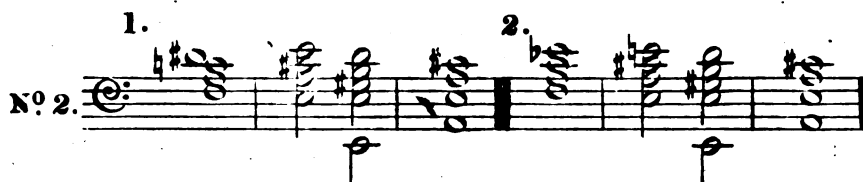


and we are to endeavour to place properly a chord of the diminished seventh on D sharp (which D sharp may be considered *enharmonically* as E flat, and vice versa) or the chord of the augmented sixth on F (which may be considered *enharmonically* as dominant seventh F, A, C, E \flat .)

EXAMPLES, with diminished sevenths.



With chords of the augmented sixths:



The same thing is to be observed in making enharmonic transitions into any key whatever. This formula, applicable to all keys and composed of four determined chords, may be shewn in a more general way as follows:

- 1st Chord: Diminished seventh placed on the semitone below the dominant into which we are modulating, or else
- 1st Chord: The augmented sixth placed on the semitone above the dominant of the key into which we are modulating.
- 2^d Chord: The second inversion of the triad of the tonic.
- 3^d Chord: The dominant seventh.

4th Chord: The direct (or not inverted) triad of the tonic. (59)

(56) If the student has already acquired some practice in finding out chords, it will be very advantageous to him, in order more clearly to perceive the progression of the individual parts (or melodies,) if he will practice setting every part on its own staff and indeed in the remaining clefs usual in score. The four clefs, soprano, alto, tenor, and base, have the following position and compass.

VIOLIN
OR
TREBLE.

SOPRANO.

ALTO.

TENOR.

BASE.

If the learner is in a condition to invert a correct succession of chords himself, he may, according to the preceding directions, set the chords for the pianoforte in score as follows:

EXAMPLE.

PIANO
FORTE.

The same as a quartett.

SOPRANO.

ALTO.

TENOR.

BASE.

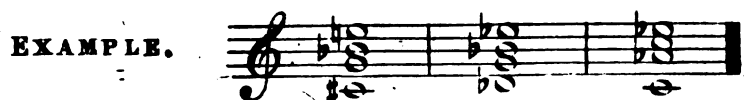
The student must keep, as much as possible in the middle octaves, between the two G's,

and For practice, many of the examples in chords found in this work may be written in this manner in more keys. - C.

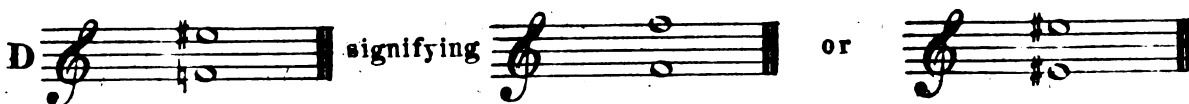
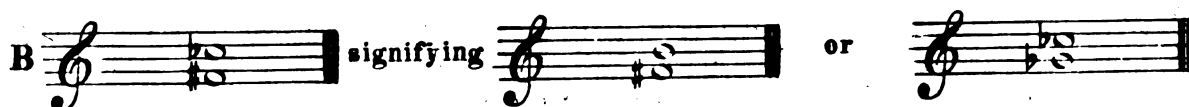
The diminished third is generally forbidden in pure harmony; but enharmonically it may have place: in this case, it represents the major second.



The diminished third, C sharp and E flat, in the second measure, stands instead of (D flat and E flat) the major second:



In the employment of the enharmonic, other intervals sometimes occur forbidden everywhere else, and which indeed do not exist in the musical system, as for example:



Here again are a few examples of enharmonic changes:

EXAMPLES.

1. Modulation by rising a semitone. 2. By falling a semitone.

3. 4.

5. 6.

7. 8.

(57)

In general, the enharmonic transitions are surprises which must not be abused. They may sometimes produce a good effect; but frequently they produce a bad one. It is a dangerous weapon in the hands of those who have not the real feeling of the art.

We do not give here the tables of modulations. They are useless; for, in order to prelude or to compose, it is indispensably necessary to know how to modulate, and when modulation is known, these tables serve no purpose.

There is moreover great inconvenience in consulting them: we find therein but a single form of every modulation, whilst the same modulation can and should be modified in different ways according to the melody, according to what may precede or follow, and lastly according to what is intended to be expressed.

(57) This $C\sharp$ represents $D\flat$, which is not written, in order that it may not disturb the execution. — R.

CONCLUDING REMARK ON THE FIRST PART,
BY
CARL CZERNY.

Besides the written exercises which learners must have performed on all the preceding in every key, those among them who have at least as much skill in pianoforte playing, as to be able to prelûde in a slow succession of chords, may learn to apply and practise all the rules of modulation in a tranquil voluntary, which the most lively power of imagination, without the help of the ear as to the effect of the different harmonies, can never clearly explain. Add to this that a talent for composition will be conducted aright by this method, which is, to the more skilful player, the preliminary exercise to extemporizing (*improvisation*), and in this view to be considered as an indispensable introductory knowledge to my "*Art of Improvisation or School of Extemporaneous Performance*." * Even those more rarely gifted individuals, who, merely through the force of inborn natural feeling, discern the difference between the regular and the inadmissible, can only, through comprehensive practical exercises, acquire that certainty in writing, which will afterward prevent every impediment arising from anxiety in composing. Thus likewise the writer of language must be accustomed to the laws of orthography &c., so as to have no longer need to think about them, while he is writing down his ideas.

— C.

* A translation of this excellent work will be published by Messrs Cocks & Co

End of the First Part.

SECOND PART.

OF ACCIDENTAL NOTES IN HARMONY.

Before discussing this important matter, the following remark, on the origin of the notes which are not reckoned in the harmony, will not be without its use.

Harmony in its origin was very limited: there existed at that time but very few chords, which proceeded in a dragging and feeble motion, and which nobody ventured to invert. Two or more notes against one did not occur. A discord was scarcely known, and could not be employed, because, for want of knowledge, it could be neither prepared nor resolved. This harmony accompanied only the Plain-chant (Choral), which was not even measured, because measures did not yet exist.

Let the harmony of that time be represented somewhat as follows:



Still however it was far from being so pure and so full.

It may readily be imagined that such harmony must soon fatigue, become uninteresting, and finally annoying. To remedy these inconveniences in some measure, the practice, sufficiently fanciful, was introduced; of ornamenting in an arbitrary way, or of flourishing at pleasure the upper part of the choral or plain-chant. This sort of prelude, made at random and without any preliminary principle, must necessarily have brought in numberless abuses and errors. John de Muris, who lived in the fourteenth century, energetically complained of them.

In order to give an idea of this arbitrary embellishment, we shall here vary the upper part of the preceding example, nearly in that taste, but probably in a manner rather more correct.

Upper part ornamented.

Harmony in four parts.



It is evident that it would be impossible to flourish, as in this example, without introducing a great many notes foreign to the chords. This practice, although had in its origin, has nevertheless eventually rendered great service to the art. It has shewn that notes foreign to the chords may be connected very well with the real notes, under certain conditions. Thenceforth treatises on composition began to prescribe rules for employing them; but much still remains to be said on this interesting subject, which we have endeavoured to explain, as much as possible, in the present article.

In harmony, two sorts of notes are distinguished.

- 1st Those which, by determining the nature of a chord, distinguish it from others. We shall call these *real, essential, or integral notes*.
- 2nd Those which are not reckoned in the chord, but are quite foreign to it, and are employed only conditionally. We shall call these *accidental, [passing.] or conditional notes*.

The general principle which admits accidental notes is founded on experience: it is by experience that we have been taught that the notes immediately surrounding a real note may serve to embellish or set off the latter.

By supposing G a *real note*, it will be found surrounded by F \sharp , F \sharp , A \flat , A \flat ; (58) this G would therefore be the principal point round which the four other notes might be arranged, and that in different ways and under various conditions.

The G might, for example, be represented with the following figures. (*Figures*):



(58) It is important to recollect that these four notes make with the real note

1st A major second below, (F \sharp G.)

2^d A minor second below, (F \sharp G.)

3^d A minor second above, (A \flat G.)

4th A major second above, (A \flat G.) — R.



As one note is common to several chords, it is clear that these fourteen figures might be accompanied by the chord of C, of G, or of E \flat , &c. and this explains at the same time the possibility of accompanying certain melodies with a different harmony.

In order to pass from one real note to another, for example, from G to C or from C to G, all the other notes found between these two may be employed.



A \flat and A \sharp are two seconds above G, and B \flat and B \sharp are two seconds below C. Here follow different ways of connecting G and C, by these four intermedial notes:



It is to be remarked that, in numbers 7 and 8, there are four accidental notes for two real notes.

According to the different ways of employing accidental notes, they may be divided into six classes, namely, -

- 1st Passing-notes.
- 2^d Fore-notes (notes of taste) in Italian, *appoggiature*.
- 3^d Syncopated notes, or simply syncopes.
- 4th Suspensions or prolongations.
- 5th The Pedal, or organ-point.
- 6th Anticipations.

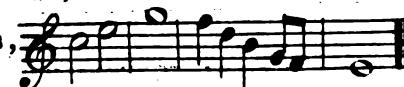
I. PASSING NOTES.⁽⁵⁹⁾

1. Passing-notes fill up the interval from one real note to another, either in a single part, or in several parts at once, as for example:

(59) Dr Crotch makes a class of unessential notes, called *adjunct notes*. "Adjunct notes are unaccented, and placed before or after essential notes, one note above or below them." Elem. p. 57. 2^d ed. See a copious example in "The Soldier tired," by Dr Arne. - M.



By omitting the passing-notes (+) of the first four measures of this example, the upper part will have only the following notes,



which are all essential. Thus the first passing-note, D, occurs between C and E, the second passing-note, F, between E and G, &c; this remark leads us to observe that passing-notes can have place only when they connect with real notes by *conjunct degrees* (or alphabetically,) in other words, when they rise or fall in scales or portions of scales.

2. Passing-notes commonly occur on the weak times of the measure, or on the weak part of the time, especially when placed in the base; but they may also take place sometimes on the strong times, principally when the chord has been already struck with its real notes alone, as may be seen in the preceding example.
3. Most frequently there is a single passing-note between two essential notes; there may however be sometimes two passing-notes.
4. The passing-notes may have place in all the parts.
5. When they occur in two parts at once, they proceed by thirds or sixths, or by contrary motion.



6. In employing passing-notes, great attention must be paid to the key in which the passage occurs, and to the real notes of the chords, and especially

(60) The passing-notes are marked thus: + — R.

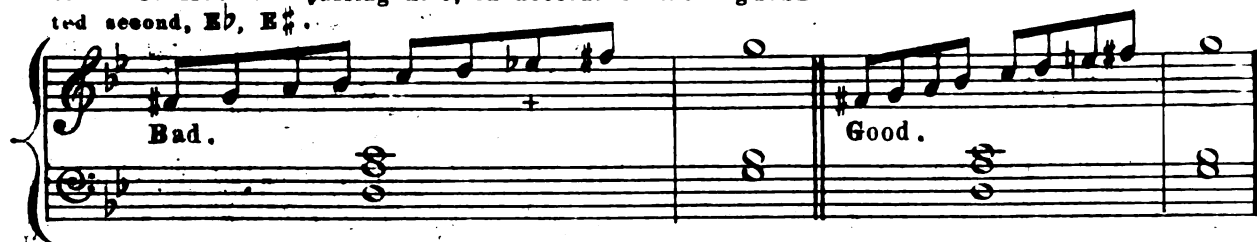
to avoid altering improperly (by accidentals) the notes belonging to the key and to the chords. (61)

Here are some examples on this subject:

E \flat cannot have place here, because there is an E \flat in the chord which must not be altered.



E \flat is bad here, because this note is not in the chord, and cannot be used as a passing-note, on account of the augmented second, E \flat , E \sharp .



The E \flat is bad, because it is neither in the scale of C nor in the chord.

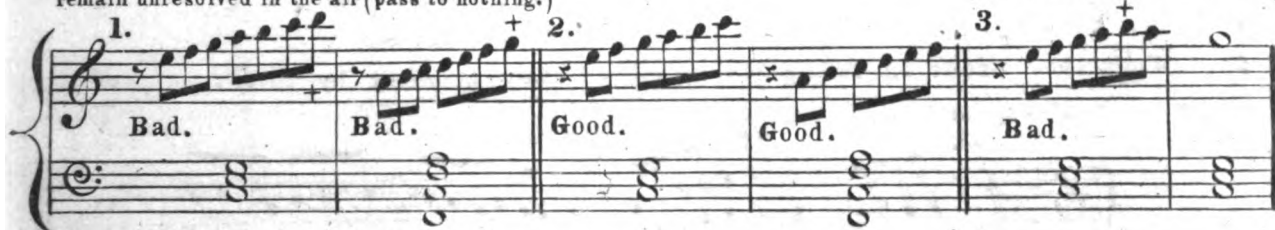
Although the E \flat is not in the scale of C major, it is good here, being a real note of the chord.



7. We cannot leave off with a passing-note: it must always pass to or resolve on a real note.

This example (1) is bad, because D \sharp in the first, and G in the second measure remain unresolved in the air (pass to nothing.)

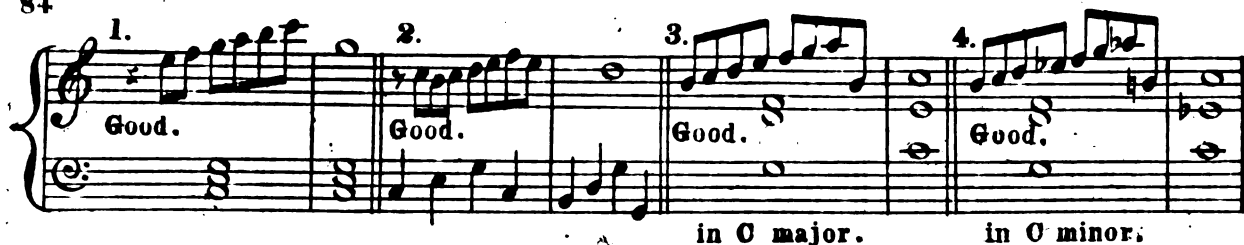
Bad, because B has no resolution.



In this example, N^o 3, the B, an accidental note, remains in suspense, because it is not one of the immediately surrounding notes of the real note G. This B belongs to another real note, C, which does not follow it.

In the following example, the B is good, because it is resolved on C its real note:

(61) The interval of an augmented second is not considered as a conjunct degree, and consequently cannot be used as a passing-note. — R.



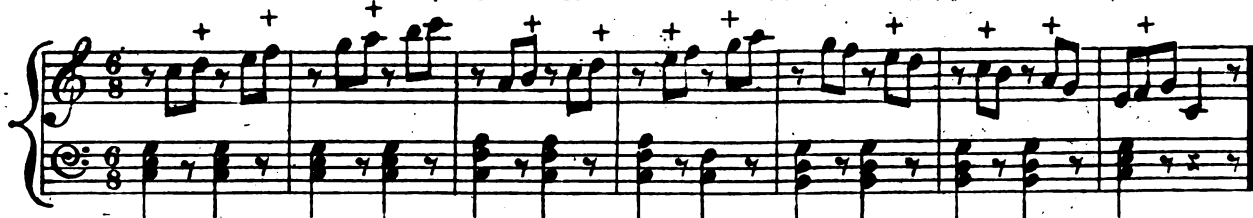
The A is good in these two examples, Nos 3. and 4, because it is a real note of the chord of the ninth (G, B, D, F, A,) major in N^o 3, minor (Ab) in N^o 4.

8. A passage is not to be begun with a passing-note: that appertains to small notes, *appoggiature*, only.

9. Passing-notes may be detached by short rests, but in this case, the movement must be rather quick.



+ ANOTHER EXAMPLE:



10. In the use of passing-notes, attention must be paid to the time of the movement and to the duration of the notes; for a passage which produces a good effect in a quick movement, may, in a slow movement, be extremely harsh. The ear must guide on this point. In general, quick movements are more favorable to passing-notes than are slow movements. The melody may however employ them in all movements. (62)

The following case is remarkable in this respect, that the passing notes may be very long and important. They are passing-notes, because we may double, triple, or even quadruplicate the C of the first and third examples, and the G of the second and fourth examples, which could not be done if these notes belonged to chords of the seventh.

(62) Thus it happens, for example; very frequently, that beginners on the Pianoforte, by slowly reading through a piece, every moment strike dissonant sounds, which are readily taken by the ignorant to be wrong, although, when performed in the right time, they produce the good effect intended by the author; and often enough, merely through false comprehension of the time and performance, many strictly regular compositions are considered ill-sounding and incorrectly written. What a contrary effect is produced by one of Sebastian Bach's fugues, for example, if not played with proper velocity and the requisite skill! — C.

1. 2. 3. 4.

in major. in minor.

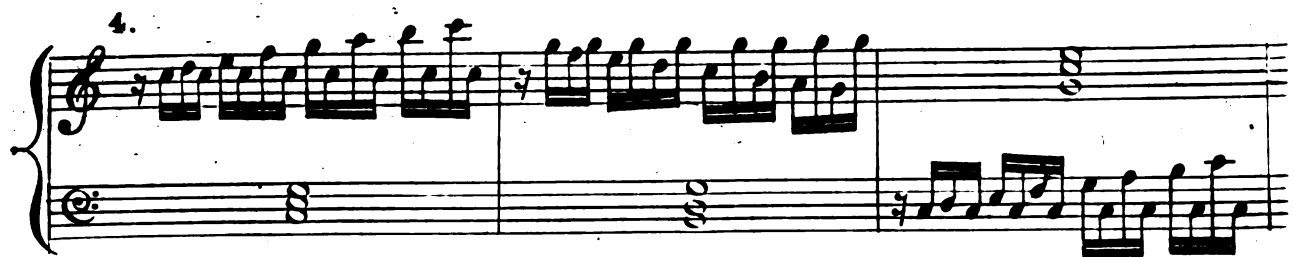
Between two chords of the tonic. Between two chords of the dominant.

Moreover, passing-notes may be used of all sorts of value or duration. In the following examples, they are introduced with different designs (*Figuren*.)



The following passages may be reckoned among the number of passing-notes:





7.

8. 7. ⁺ ⁺ ⁺

Passing-notes on the chord of the augmented sixth.

9.

10.

11.

12.

When a chromatic scale begins and ends with the same note (for example from C to C,) passing through all the semitones comprised in the octave, it may be accompanied by a great many different chords.

EXAMPLE.

The musical example consists of four systems of two staves each (treble and bass clef). Each system contains three numbered measures (1-3, 4-6, 7-9, 10-12). The top staff of each system contains a chromatic scale (semibreves) with a slur over it. The bottom staff contains a single chord for each measure, indicated by a large 'S' and a key signature. The chords are: 1. C major, 2. C minor, 3. D major, 4. D minor, 5. E major, 6. E minor, 7. F major, 8. F minor, 9. G major, 10. G minor, 11. A major, 12. A minor.

In this example, twelve different chords are enchainéd under the same chromatic [or semitonic] scale; but in order that this may be done, it must be observed that the first and last notes of this scale must be integral or essential notes of every chord.

The diatonic scales with passing-notes in the minor mode offer greater difficulty than in the major, because it is frequently necessary to raise accidentally the sixth and seventh degrees of the minor scale a semitone higher. The following examples shew in what cases these alterations are good or bad.⁽⁶³⁾

(63) We shall indicate throughout these two notes by a cross (+) — R.

In A minor.

Raise the 6th and 7th degrees, in ascending.

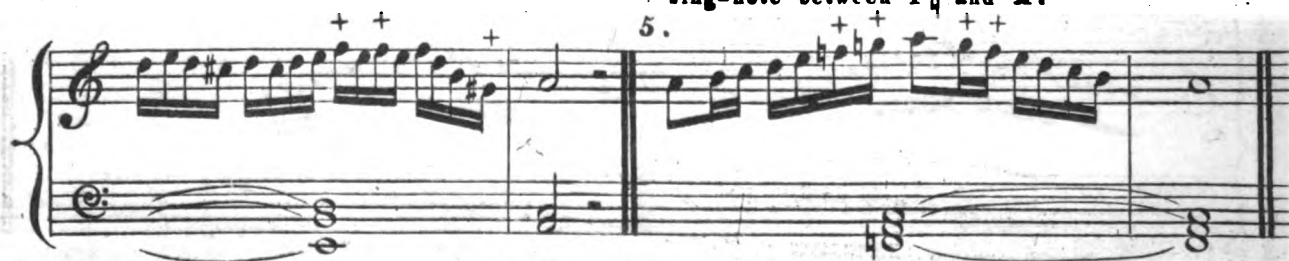
Raise both notes in ascending, and only one (the 7th) in falling, as $F\flat$ is better than $F\sharp$.



$F\flat$ is considered as belonging to the minor ninth.



Nothing is raised here, because, $F\flat$ being an essential note, $G\sharp$ could not be a passing-note between $F\flat$ and A.



For the same reason, neither F nor G can be raised, but G may, at pleasure, in rising only. In falling, $B\flat$ cannot be taken, because it is not in the scale of A minor.

In this example, G only must be raised, because $G\sharp$ and $F\flat$ are essential notes of the chord of the minor ninth.



The notes of a scale may be altered in various ways by accidentals, according to the key wherein the music is found, and according to the chord which accompanies that scale.

1. In C major.

2. In D minor or in F major.

3. In D major.

4. In G minor.

5. In Bb.

6. In E minor.

(C♯, being an essential note which cannot be altered, must have D♯ in rising, for D♯ cannot be a passing-note after C.)

7. In G minor.

8. In C major.

(E♭ and F♯ being essential notes of the chord, it would be a great fault to change E♭ into E♮ or F♯ into F♮.)

B♭ must be taken as belonging to the key.

(68) If, in the middle of a run through the scale, the chords change (*modulate*), the scale itself must naturally undergo the same changes; for example:

A scale on the chord of the augmented sixth can take place in the following manner only:



$A\flat$, C , $E\flat$, and $F\sharp$, being essential notes which we dare not alter, $B\flat$ must be taken in this scale and not $B\sharp$, because $B\sharp$ cannot be considered as a passing-note when preceded or followed by $A\flat$. But, in proceeding by semitones, we may write thus:



(64) On account of the harshness of this run, or division, its use can scarcely ever be recommended. Yet if the composer wishes to introduce a longer scale on the chord of the augmented sixth, he may have recourse to an enharmonic change of chord, in order to soften the effect; for he can take the augmented sixth at the beginning as a chord of the dominant seventh, (here in $D\flat$), and then write as follows:



OTHER EXAMPLES OF PASSING-NOTES.

The image contains five musical examples, numbered 1 through 5, each consisting of a piano (left) and treble (right) staff. Example 1 shows a treble staff with a series of eighth-note runs and a piano staff with block chords. Example 2 shows a treble staff with eighth-note runs and a piano staff with block chords. Example 3 shows a treble staff with eighth-note runs and a piano staff with block chords. Example 4 shows a treble staff with a single note and a piano staff with a descending eighth-note run. Example 5 shows a treble staff with a series of chords and a piano staff with a series of chords. The word "Roots." is written below the piano staff of example 5.

The fifth example may be adventured in a quick movement in a major key only, and by taking care to place the roots of the chords in the base.

The passing-notes may be also varied by all sorts of Figures.⁽⁶⁵⁾ Here are five notes, whereof two are passing-notes, varied in ten ways.

(65) *Figuren*, Germ. This term, now freely used in English, commonly signifies such symmetrical groups of notes as are shewn in the following ten variations. See Koch's Lexicon, p. 569 - M.

MELODY.

SUBJECT,
THEME or }
MELODY.

1. VARIATION.

2. VAR:

3. VAR:.....

4. VAR:

5. VAR:

6. VAR:.....

7. VAR:

8. VAR:.....

9. VAR:

10. VAR:

**ACCOMPANYING
BASE.**

All simple harmony is, in general, capable of being varied in several ways by means of passing-notes. It is, indeed, an excellent practice to take harmonic phrases of less or greater length, in two, three, or four parts, and vary them.

Here are two examples on this subject, the first of which is in two parts,
the second in four parts.

Nº 1.

SUBJECT

1. VAR:

2. VAR:

3. VAR:

BASE.

4th Var:

5th Var:

6th Var:

7th Var:

8th Var:


9th Var:

SUBJECT



1st VARIATION
in the
upper part.

1.



2^d VARIATION
in the
second treble.

2.



3.
3^d VARIATION,
in the
Alto.

Musical score for the 3rd variation, featuring four staves. The first staff has a treble clef and a key signature of one sharp (F#). The second staff has a treble clef. The third staff has an alto clef (C4). The fourth staff has a bass clef. The music consists of a series of eighth and sixteenth notes, with a final measure containing a trill marked with a 'tr' symbol.

4.
4th VARIATION
in the
Base.

Musical score for the 4th variation, featuring four staves. The first staff has a treble clef and a key signature of one sharp (F#). The second staff has a treble clef. The third staff has an alto clef (C4). The fourth staff has a bass clef. The music consists of a series of eighth and sixteenth notes, with a final measure containing a trill marked with a 'tr' symbol.

5.
5th VARIATION
in both
Trebles.

Musical score for the 5th variation, featuring four staves. The first staff has a treble clef and a key signature of one sharp (F#). The second staff has a treble clef. The third staff has an alto clef (C4). The fourth staff has a bass clef. The music consists of a series of eighth and sixteenth notes, with a final measure containing a trill marked with a 'tr' symbol.

Alto part
put in
the treble.

6th VARIATION
in the
three
under parts.

6.

7th VARIATION
in the
four parts
at once.

7.

(66) With increasing practice, the young composer will more and more understand that the passing-notes are to be introduced with regularity and great circumspection; that it is also duly to be considered for what instruments he is writing, as, for instance, for the full orchestra, in which, through the great variety of the instruments, many passing-notes may have a good effect, which with the pianoforte or wind instruments only (or indeed with voices) would sound extremely harsh; that again, in quick passages, very favorable to the pianoforte, especially in the higher octaves, many peculiarities are allowed with fine effect, &c. The right employment of these passing-notes ever requires a correct natural feeling for euphony, refined by practice, taste, attention and propriety. The same remarks are applicable to the succeeding chapters on appoggiaturas, suspensions, &c. - C.

II. OF SMALL NOTES OR NOTES OF TASTE. ⁹⁹ (APPOGGIATURE).

The appoggiaturas are written in two ways, namely, -

With small notes
or
with the common notes. (67)

In the first case, a greater or less value may be given to these notes, according to the character of the piece:

EXAMPLE.

In the second case, they must be executed with the value prescribed by the composer.

1. The small notes are commonly placed on the strong times of the measure, or on the strong part of the time.

One of their distinctive properties is, that we may, without inconvenience, strike them simultaneously with the essential notes of the chords, and give them even in this case a very great value.

EXAMPLE.

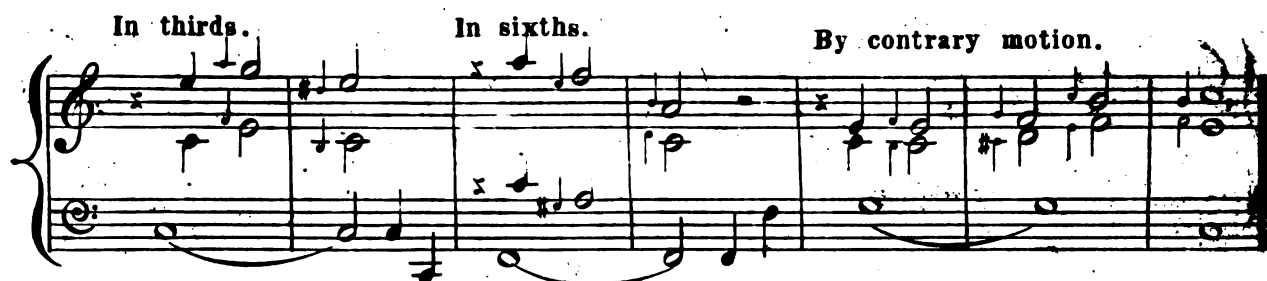
2. They occur principally in the melody and especially in the upper part. They are also sometimes placed in the middle parts, and even in the base, but with much circumspection; for they might often disfigure the chords and render them harsh and uncertain.

3. They are resolved by falling or rising by conjunct degrees: in the first case, they are made with the notes such as they are found in the scale of the key where in the passage occurs. In the second case, they are almost always made with leading-notes, in order that they may be only a semitone from the essential notes.

EXAMPLE in C major.

(67) In this last example, there are no appoggiaturas for the eye; but as, in regard to the harmony, they are derived from the same principle as the preceding small notes, they really exist for the ear. - R.

4. They may be made likewise with two parts at once.



In this case, the harmony is in three parts only; but if the double appoggiaturas were of small value, as quavers or semiquavers, they might be in four parts or more.

5. Sometimes two appoggiaturas in succession are set as in the following way:

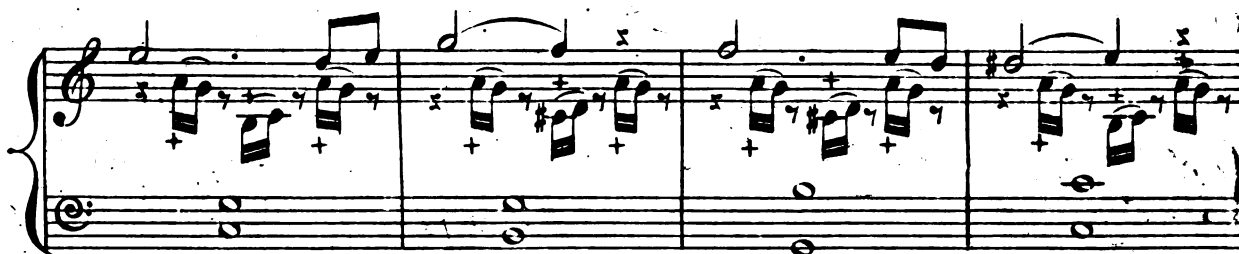


6. Appoggiaturas and passing-notes may be employed successively in the same passage. (68)

EXAMPLE.



Another example of appoggiaturas, here marked by a cross, +.



(68) The appoggiaturas [or fore-notes] are indicated by a hyphen (—) and the passing-notes by a cross (+). — R.



REMARKS ON THIS EXAMPLE.

(1). The E falls a fifth in resolving. This resolution of the appoggiatura is an exception which may take place in the upper part only, and by taking care to prepare the appoggiatura; in other words, to strike it as an essential note, in the preceding chord.

(2). Although the scale of E minor wherein this occurs seems to require that C \sharp should be taken as appoggiatura to B, it is better here to take C \sharp , because C \sharp would make bad melody with the preceding A \sharp , on account of the diminished third.

(3). The whole of this passage is a mixture of appoggiaturas and passing-notes, which must be represented as being written in the following way:



It is obvious that not only the essential notes, but also the passing-notes, marked thus ~, are preceded by appoggiaturas.

(4). In this measure, there are three appoggiaturas at once: this is often practised on the last chord of cadences.

When the appoggiatura is to be of long duration, it will be well not to strike it till after having sounded the chords without any mixture of foreign notes. This rule is especially important, when the appoggiaturas are placed in the base or in a middle part.



In the last two examples, the appoggiaturas may be struck with the chords in all the parts without harshness, because they are of short duration.

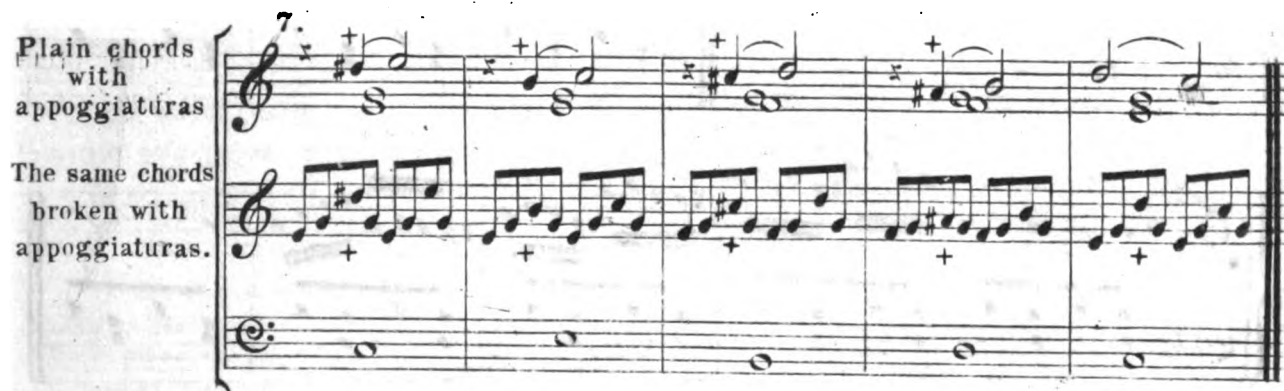
When it is desired to make appoggiaturas in a middle part, care must be taken to remove the three other parts to a distance from the part in which they are placed.

EXAMPLE.



They may be also employed with broken cadences.

EXAMPLE.



There are certain ornaments of melody and even whole passages which are written in *small notes*; but it must not be thought that this succession of small notes is entirely composed of appoggiaturas. It is then a mixture of essential notes, passing-notes, and notes of taste [fore-notes.]

EXAMPLE.

Organ-point
or Cadenza.

We have said before, that the appoggiaturas which are resolved by rising, make a semitone with their essential notes. Here are however two exceptions to that rule:

EXAMPLE.

In this example, the A♯ struck after F♯ would not sing well, and it is better to take A♮.

In this example, the appoggiatura is prepared, namely, struck in the preceding chord as an essential note, and the harmony makes a perfect cadence. It is under this twofold condition that D♯ may be taken instead of D♮.

It is with reason that, in France, the appoggiaturas are called notes of taste (*Notes de Goût*); for it is taste which directs the use of them, especially when they are placed in the melody. (69)

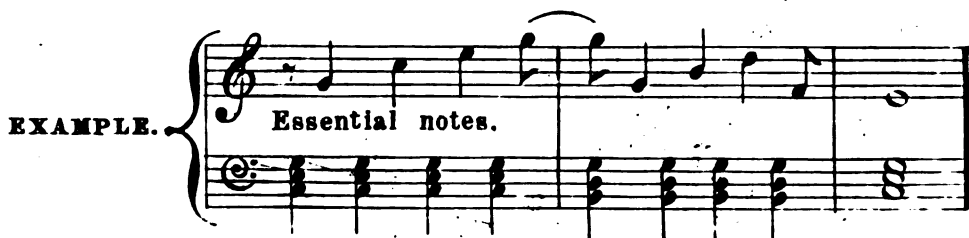
(69) From this section on the appoggiaturas, the learner can moreover understand that if in compositions (especially in those of the most recent times), he occasionally stumbles on heterogeneous combinations appearing as new chords and harmonies, which are neither to be found in the classification nor admit of explanation by the established rules of harmony, he has to attribute their origin to the use (at present much too free) of appoggiaturas &c. - C.

III. OF SYNCOPATIONS.

105

Syncopations are slight retardations of the essential notes, as also of the passing-notes and appoggiaturas.

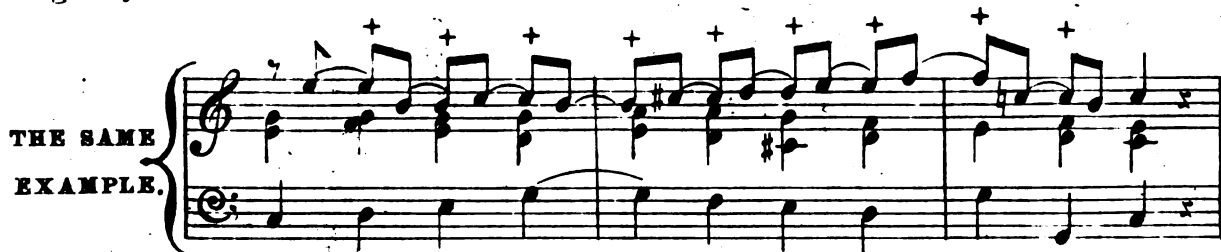
We shall here speak of the syncopations which contain notes foreign to the chords only; for the following example, containing essential notes only, affords no remark on this kind of accidental notes.



The syncopations which we have to speak of are those in which the second half becomes an accidental note:



This becomes still more evident by writing the same example in the following way:



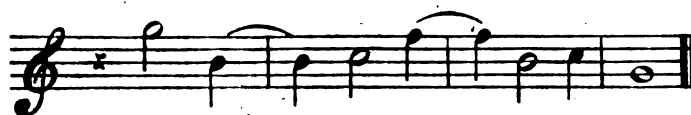
It is obvious that the second half of the syncopation, marked +, is a note foreign to the chord which is placed underneath; and that the good note of the same chord comes afterward only. This leads us to observe that the second half of the syncopated note always represents or occupies the place of the note which follows. In the preceding example, the second half of E represents B; the second half of B represents C, and so on. Consequently, to be assured that the syncopations are placed properly, every syncopated note must be commenced one half its value sooner, and struck with the chord itself to which it belongs.

THE SAME EXAMPLE WITHOUT SYNCOPATIONS:



If the harmony is not correct, after having submitted the syncopations to this trial, they are bad.

In a quick movement, there may be syncopations of the following value:



Again, in a moderate movement, syncopations may be of this value:



They may also be made in two parts at once:



They are scarcely employed but in the melody; rarely in the middle parts, and still more rarely in the base; they are not however wholly excluded from it.

EXAMPLE.



As the syncopations are struck on the weak parts of the measure, or in *contratempo*, there must necessarily be at least one part of the harmony that does not syncopate and which marks all the times of the measure,

that it may not be rendered uncertain or difficult to comprehend. (70)

The syncopations may be at the same time passing-notes or appoggiaturas.

EXAMPLES.

Syncopated passing-notes.



Syncopated appoggiaturas.



The following are some more extended examples on the same subject:



(70) Besides, in Beethoven and some modern authors, passages like the following are found, which, by short duration and in quick time, have a great and peculiar effect.

Allégo molto.



The perturbation expressed by this syncopated motion, in the places referred to, excites the hearer's attention in an extraordinary manner.— C.

In a moderate movement, syncopations of the following value may be made, in the upper part only.



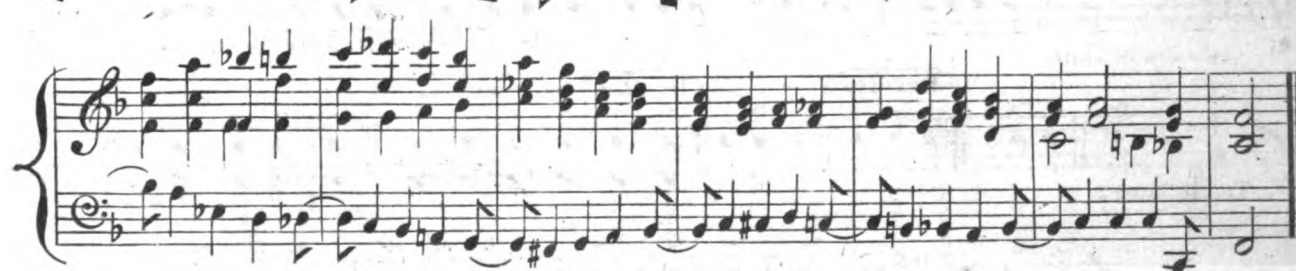
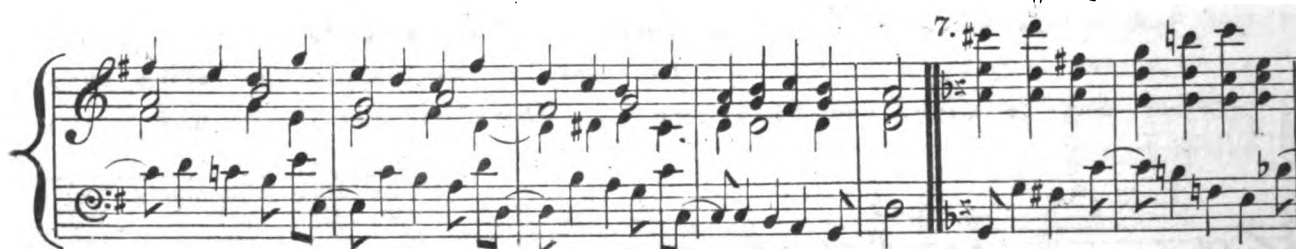
4. Syncopations in a middle part.



Syncopations in three parts at once. These should always proceed by conjunct degrees.



6. Syncopations in the base.



A series of syncopations in the base as long as that of the two examples preceding (N^{os} 6 and 7) could be made on the pianoforte or on the harp only. Everywhere else, and especially in the orchestra, it would be too difficult to perform, and as it would contradict the measure for too long a time, it would even through that alone, become painful to the auditor.

IV. OF SUSPENSIONS or PROLONGATIONS.

Of all the kinds of accidental notes, suspensions are the most remarkable, the most interesting, and the most valued. Every suspension requires, without exception, the following conditions:

1. The suspension must be prepared.
2. It must occur on the *strong times of the measure*.
3. It must always be resolved diatonically by descending, rarely by rising.
4. This resolution must take place on the *weak times of the measure*.

Preparation. Suspension. Resolution.

EXAMPLE.

The preparation and the resolution should always be essential notes. The suspension alone is an accidental note. There must be at least two chords in order to employ a suspension, the first being for the *preparation*, the second for the *suspension* and *resolution*. The suspension represents the note on which its resolution takes place: it is always necessary to be able to put the resolution in the place of the suspension, if inclined to omit the suspension: without this condition, the suspension would be bad.

The preparation should have at least as much value [or duration] as the suspension; but the suspension may have greater value than the resolution. In triple-time measures, it happens however frequently enough that the preparation has a less value than the suspension. Here is a table in which we have pointed out by a hyphen (-) the times of the measure on which suspensions may be made, and by a turn (~) those on which they may be resolved.

The suspension may have the value of a whole measure: in this case, the resolution takes place on the first time of the measure following.

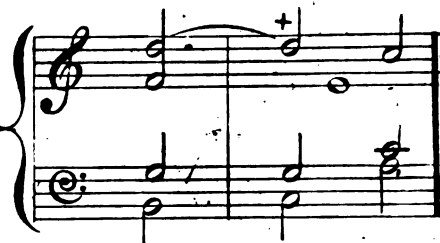
Suspensions are single or double. The single are those where a single note is suspended, in any part whatever, and requires but a single preparation. The double are those where two notes are suspended at once, in two different parts, and which consequently require a double preparation.

We have said before that two chords at least are necessary in order to employ a suspension. It often happens moreover that three chords are taken, whereof the first is placed under the preparation, the second under the suspension, and the third under the resolution. According to these remarks, we shall divide suspensions:

1. Into single suspensions, with two chords:.....



2. Into single suspensions, with three chords:.....



3. Into double suspensions, with two chords:.....



4. Into double suspensions, with three chords:.....



Generally are suspended—

- 1st The third and the root in perfect triads;
- 2nd The third in the chords of the seventh;

3^d The leading-note in the diminished seventh, in the augmented sixth, in the augmented fourth and sixth, and generally in all chords where in the leading-note is found: The other notes in all these chords are rarely suspended, and the cases can be well known only by great practice. The greater part of them we have indicated in what follows.

The interval formed between the suspension and the base may be a third, a fourth, a fifth, a sixth, a seventh, or a ninth.

The fourth, the seventh, and the ninth are the suspensions the most frequently used.

Single suspensions with two chords are resolved in the following manner:

The 3rd on the 2nd

The 4th on the 3rd

The 5th on the 4th

The 6th on the 5th

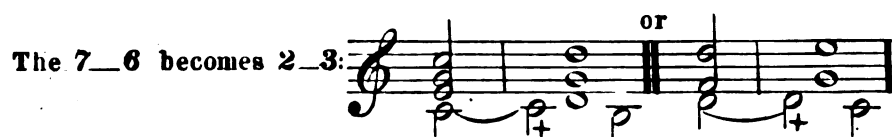
The 7th on the 6th

The 9th on the 8^{ve}

These suspensions are commonly indicated by figures, in the following way:

3 — 2, 4 — 3, 5 — 4, 6 — 5, 7 — 6, 9 — 8.

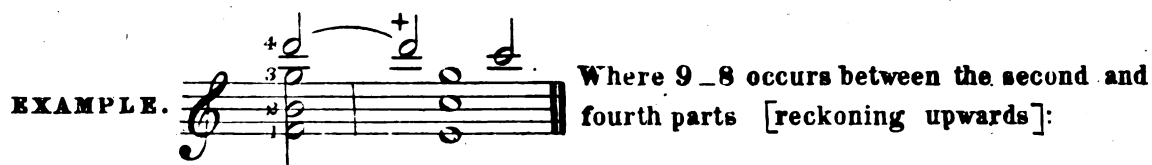
As all these suspensions (excepting the ninth on the octave) may be inverted, by putting the suspension in the base, and the base-note in a high part, they offer the following table:



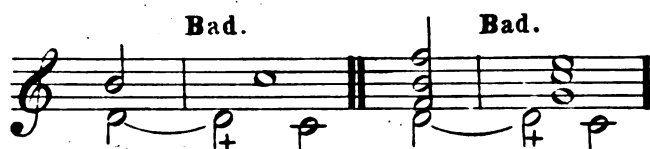
The suspension of 9—8 is remarkable, first, because the suspended note itself is struck under the suspension at the distance of a ninth:



This may take place not only between the base and a high part, but sometimes also between two high parts in harmony in four parts.



Secondly, because it is not invertible; thus we cannot make in any case,



The suspensions 4—3, 7—6, and 9—8, are also very remarkable, inasmuch as they may be resolved on the inversion of the suspended chord, or on a new chord.

We give a table here of the different resolutions of each of these three suspensions.



(n) This suspension is scarcely practicable in the base; besides it is consonant and therefore loses the effect of this kind of accidental notes. — R.

4-3: 7^b $4-5$ $4-6$

6 (aug: 6^{th}) $7-6$

7-6: or

7-3: 7-5 (dimin:)

7-2: 9-8

9-3: or 9-5 (diminished 5^{th})

9-6: 9-7 (dimin: 7^{th}) seldom. 9-2 (maj 2^{nd})

Suspensions in the base with three chords are rare; yet the following examples may be practised successfully.

1. 2. 3. 4.

5. 6.

or

By examining all these examples with attention; it will readily be perceived that nearly all the chords of the classification are more or less capable of being suspended; yet the two perfect triads, the diminished triad, the chord of the dominant seventh, and the chord of the augmented sixth* (wherein the 6th alone is suspended, producing the suspension 7—6), are those in which suspensions are most frequently employed. The other chords, being already sufficiently discordant of themselves, might be too much disfigured by making suspensions in them.

Here are some progressions good to be known wherein the single suspensions are frequently used.

N^o 1.

9_3 9_3 9_3 9_3 or else. 9_3 9_3

9_3 9_3 or else. 9_3 9_3 9_3 9_3 9_3

N^o 2.

4_3 9_3 9_8 9_8 or else. 4_3

9_8 4_3 9_8 4_3 9_8 4_3 9_8 or else. 2_3 4_3 2_3 4_3 2_3

N^o 3.

4_3 4_3 4_3 4_3 4_3 or else. 2_3 4_3 2_3 4_3 2_3

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Nº 4.

9 — 6 9 — 6 9 — 6 9 — 6 9 — 6 9 — 6 9 — 6

9 — 6 9 — 6 9 — 6

Nº 5.

2 — 3 2 — 3 2 — 3

Nº 6.

A succession of dominant sevenths with suspensions.

4 — 3 4 — 3 4 — 3 4 — 3 4 — 3

Here are two examples in which suspensions might be practised in the following manner:

1. 2. 1. 2. (7b) 4 — 7 7 — 5

(7b) This chord presents to the eye a chord of the seventh of the fourth species (B \flat , D, F, A,) with which it must not be confounded; for, as such, it would have neither a regular resolution, nor the series of chords which we have assigned to it. Similar mistakes may often be made with suspensions; and it is of importance to pay great attention to them in order to avoid making false resolutions and bad connections between the chords. — R.

We have shewn what is most essential to be known respecting single suspensions with two and with three chords. This is the kind of suspensions which may be the most employed.

With regard to double suspensions, they are less used and offer much fewer resources. In order to make a double suspension, there must necessarily be 1st a double preparation, 2^{dly}, a double resolution; and it frequently happens that the chord which precedes the suspension does not furnish the two indispensable notes for the preparation. It is for this reason that double suspensions can be used but rarely. They are found in the high parts only.

The resolution of a double suspension is made in two ways: first, by resolving both suspensions at once, or, secondly, by resolving one after the other.

Here are examples of double suspensions with two and three chords.

A double suspension whereof both parts are resolved at once:

EXAMPLE.

When it is wished to resolve one of the two suspensions before the other, it is necessary, *first*, to resolve the lower before the upper one, when both parts are in sixths,

EXAMPLE.

Secondly, to resolve the upper note before the under one, when both parts are in thirds.

EXAMPLE.

A succession of double suspensions, wherein one part is resolved after the other:

ANOTHER EXAMPLE.

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Here again is a remarkable succession of double suspensions.



The same example in triple time, with the double suspensions resolved one after the other.



These examples are sufficient to shew the manner of treating double suspensions with two and three chords, whether by resolving them simultaneously or successively.

It is sometimes allowed to treat suspensions in the following way:

1st The preparation and suspension struck, (*staccato*) instead of being tied.

EXAMPLE

2nd The suspension and resolution preceded by short rests.

EXAMPLE

After a dominant seventh, a triple suspension may be made:

EXAMPLE

It further appears by this example that a suspension may sometimes, but rarely however, be resolved by rising.

Here are some examples of suspensions resolved in that way:

The suspension rises a semitone.

1

Single suspensions.

or else.

2 — 3

5 — 6

7 8

Double suspensions.

or else.

2.

3.

9 — 3

9 — 3

In this last example (N^o 3.) the suspension rises a whole tone; but this case, still much more rare, can occur only in the highest part, and when the resolution is made on [the mediant or] the third above the tonic.

Passing-notes may also be mixed with suspensions, but that must be done so as not to injure their effect nor that of the preparation and resolution. On this subject we shall give the following rule.

The notes which are struck exactly under the preparation, suspension, and resolution, must be *essential notes* and not *passing-notes*.



The essential notes of the base are:



and they are struck exactly under the preparation, suspension, and resolution.

The suspension is a discord, frequently very powerful, which is pleasing only when well prepared and especially when well resolved. By striking a passing-note exactly under the preparation, suspension, or resolution, the effect of them might be destroyed, and the harmony rendered uncertain and harsh. Hence passing-notes can be placed only:—

1st Between the preparation and suspension.

2^{dly} Between the suspension and the resolution.

3^{dly} After having struck the chord of the resolution with its essential notes.

Here follow examples of the mixture of passing-notes with suspensions:



Handwritten musical score for piano, consisting of four systems of staves. The notation includes notes, rests, and various fingerings indicated by numbers and symbols.

System 1: Treble and Bass staves. Treble staff has a sharp key signature and a common time signature. Bass staff has a common time signature. Fingerings: 5-6, 9-6, 9-6, 5-6.

System 2: Treble and Bass staves. Treble staff has a sharp key signature and a common time signature. Bass staff has a common time signature. Fingerings: 4-3, 4-3, 5-6, 9-6, 9-6, 9-6.

System 3: Treble and Bass staves. Treble staff has a sharp key signature and a common time signature. Bass staff has a common time signature. Fingerings: 4-3, 9-3, 7-6, 4-3.

System 4: Treble and Bass staves. Treble staff has a sharp key signature and a common time signature. Bass staff has a common time signature. Fingerings: 5-6, 4-3, 7-6, 7-6.

This page contains four systems of musical notation, each consisting of a grand staff (treble and bass clefs) and a single bass staff. The notation includes various musical symbols such as notes, rests, and accidentals. The bass staffs feature figured bass notation, which includes numbers and symbols indicating fingerings and intervals. The systems are arranged vertically, with the first system at the top and the fourth at the bottom. The page is numbered 121 in the top right corner.

Figured bass notation includes the following figures:

- System 1: 9-6, 9-8, 9-8, 7-6, 9-8, 5-6
- System 2: 4-3, 9-8, 4-3, 7-6, 9-8, 9-8, 9-8
- System 3: 4-3, 5-6, 5-6, 4-3
- System 4: 5-6, 5-6, 7-6, 9-8, 4-3

Suspensions may also be employed in broken [*figured or arpeggio*] chords.

Plain chords.

The same chords broken or figured.

The musical notation illustrates the concept of broken chords (arpeggios) compared to plain chords. It consists of three systems. Each system has a treble staff showing plain chords and a bass staff showing the same chords broken or figured. The first system shows chords with figures 4, 3, 9, and 3. The second system shows chords with figures 9, 8, 7, and 6. The third system shows chords with figures 9, 6, 4, and #3.

On comparing the chords arpeggio with the same chords plain, it will be found that the suspensions are equally well prepared and resolved in the former as in the latter. The only difference is that all the notes are struck simultaneously in the plain chords, whilst they are struck successively in the broken chords.

It happens sometimes that a suspension goes to an intermediate note before it is resolved.

EXAMPLE

The musical notation shows four examples of suspensions. Each example is a single staff with a treble clef and a key signature of one sharp (F#). The examples are numbered 1, 2, 3, and 4. Example 1 shows a suspension of G#4 over F#4, resolving to F#4. Example 2 shows a suspension of G#4 over F#4, resolving to F#4. Example 3 shows a suspension of G#4 over F#4, resolving to F#4. Example 4 shows a suspension of G#4 over F#4, resolving to F#4.

That intermediate note commonly belongs to the chord placed under the suspension, as in numbers 1, 2, and 4. In N^o 3, the B is an appoggiatura which precedes the resolution. Here is a case of this kind, which is met with frequently enough in the cadences of church-music:



In this example, the A of the upper part is placed between the suspension, C, and the resolution, B.

Suspensions may also be varied; but this practice is extremely limited: here is an example:

A succession of double suspensions.

A musical score for a short piece in G major, 4/4 time. It consists of two staves. The upper staff begins with a treble clef and a key signature of one sharp (F#). The lower staff begins with a bass clef and a key signature of one sharp (F#). The music features a succession of double suspensions. The first staff is labeled 'The same suspensions varied.' and the second staff is labeled 'The same suspensions varied differently.' The piece ends with a double bar line.

When the suspensions are very short, they may be considered as syncopations; but the two must not be confounded, for passing-notes and appoggiaturas may be syncopated, as we have shewn, resolving the syncopated note on any interval whatever, whereas this is impracticable with suspensions. The syncopation is always of short duration; the suspension on the contrary, may be very long.

Suspensions ennoble the harmony. They often render that new and striking which is worn out and spiritless. The following succession of sixths, which excites by



itself very little interest, may become striking by means of suspensions.

EXAMPLES.

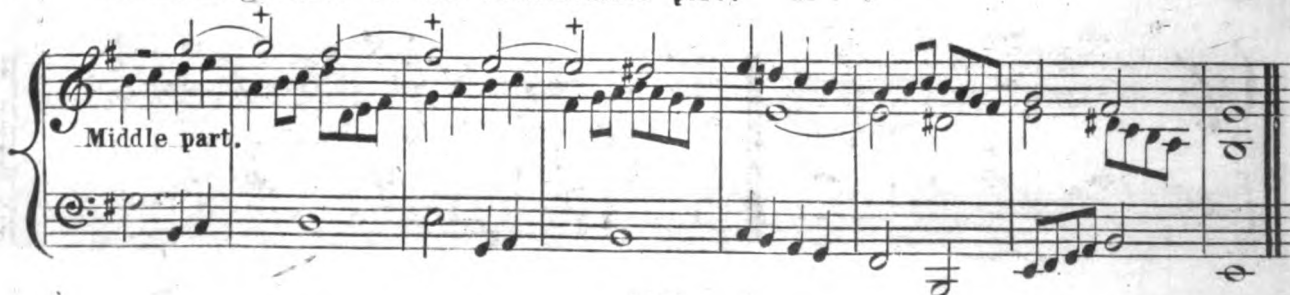


Here are still a few examples on this important article, and on which too many cannot be given:

1. Suspensions, with passing-notes in the base.



2. Passing-notes in the intermediate part.



3. Passing-notes in the upper part.



4. Suspensions in the base.



5. A succession of suspended diminished sevenths.



6. Another example.



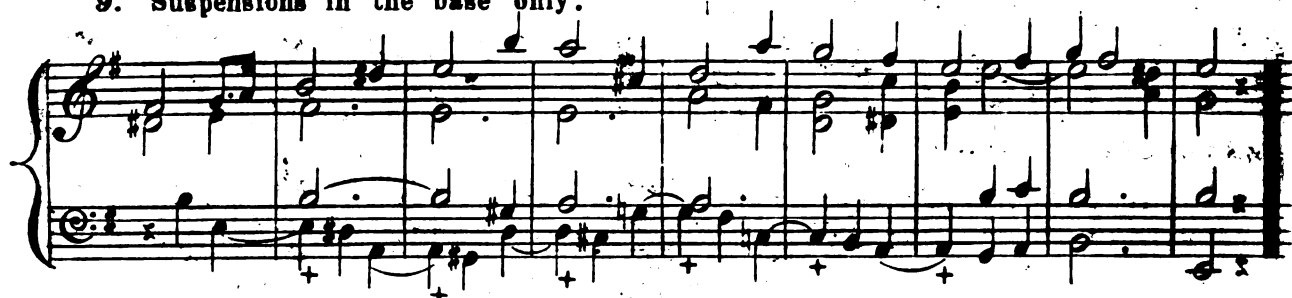
7. Suspended dominant sevenths.



8. Suspensions in the upper part only.



9. Suspensions in the base only.



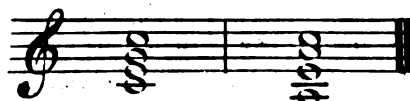
10. The suspensions are here prepared on the first time of the measure, take place on the second, and are resolved on the third time: this occurs in triple-time only.

They are indicated here by (+) on the preparation.



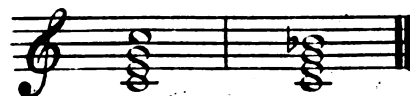
To make a series of suspensions, chords must be chosen so as to furnish the preparation of every one of them. Thus, when the radical base of these chords proceeds by falling thirds, there is no suspension to be made.

EXAMPLE.



It is the same when the radical base does not alter.

EXAMPLE.



But in the succession by rising or falling a fourth, fifth, and second, they can always be employed.

The succession by rising a third gives but one suspension, little used, unless the chord on which it is made be already a discord of itself.

EXAMPLE



It is sometimes allowed, in using suspensions, to resolve the leading-note irregularly, but only in the current of phrases, and never at the end.

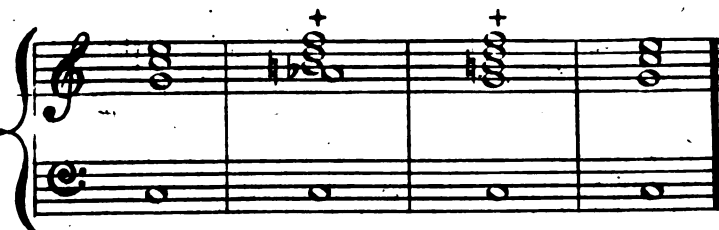
EXAMPLE



V. OF THE PEDAL, or ORGAN-POINT.

The Pedal [*Pedale*] is a note more or less prolonged in the base, on which a series of chords is placed, several of these chords being entirely foreign to it.

EXAMPLE



The note C is here foreign to both the chords marked with a cross, (+). The C is consequently an accidental note in these two chords, whilst it is an essential note in the two other chords.

The Pedal is therefore a note (the lowest of the harmony) which becomes an essential and an accidental note by turns. According to this definition, the following example is not a *Pedal*, but merely a *holding-note*; because C, which is prolonged in the base, is a real or essential note of all the chords set above it.



1. The Pedal, or organ-point, can take place only on the *tonic* or on the *dominant*, of a *major* or *minor* key. It is employed most frequently in the principal [or original] key; but it may however have place in every relative key also.
2. It must always be the root of the chord which begins and terminates it; and consequently these two chords cannot be inverted.
3. The part which is set immediately above the pedal-note, must be treated nearly as though it were itself to form a good base to the harmony; yet this rule has some exceptions, in the employment of inverted chords.
4. The best Pedal is that which becomes almost as often an essential as an accidental note of the chords under which it is placed.

All the chords taken in the same scale may have place on the pedal-note.

Passing notes, appoggiaturas, syncopations, and suspensions, may be used on the pedal-note. Regular progressions of chords are very frequent on it.

HERE ARE SOME EXAMPLES.

1. In C major.

Organ point on the Dominant.

Dominant.

This musical example shows a piano accompaniment in C major. The right hand plays a series of chords and single notes, while the left hand plays a continuous eighth-note bass line on the dominant note (G). The text 'Organ point on the Dominant.' is written above the staff, and 'Dominant.' is written below the staff.

2. In C major.

Organ point on the Tonic.

Tonic.

This musical example shows a piano accompaniment in C major. The right hand plays a series of chords and single notes, while the left hand plays a continuous eighth-note bass line on the tonic note (C). The text 'Organ point on the Tonic.' is written above the staff, and 'Tonic.' is written below the staff.

3. In C major.

On the Tonic.

This musical example shows a piano accompaniment in C major. The right hand plays a series of chords, some of which are marked with a '+' sign. The left hand plays a continuous eighth-note bass line on the tonic note (C). The text 'On the Tonic.' is written above the staff.

This example can be practised in a quick movement only, wherein none of the chords, marked thus + must be dwelt upon: it is necessary indeed that the parts be placed; as here, at a great distance above the pedal-note.

4. In C minor.

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Organ-point on the dominant.

Dominant.

This musical exercise is in C minor. The right hand features a melodic line with various intervals and accidentals, while the left hand provides a steady accompaniment of eighth notes. The exercise is labeled 'Organ-point on the dominant' and 'Dominant'.

5. In C minor.

Organ-point on the tonic.

This musical exercise is in C minor. It features a melodic line in the right hand and a bass line in the left hand. The exercise is labeled 'Organ-point on the tonic'.

Organ-point on the tonic, wherein all the chords are taken in one and the same scale.

This musical exercise is in A major. It features a melodic line in the right hand and a bass line in the left hand. The exercise is labeled 'Organ-point on the tonic, wherein all the chords are taken in one and the same scale'.

6.

In A major.

Tonic.

This musical exercise is in A major. It features a melodic line in the right hand and a bass line in the left hand. The exercise is labeled 'In A major' and 'Tonic'.

7. Another example.

This musical exercise is in A major. It features a melodic line in the right hand and a bass line in the left hand. The exercise is labeled 'Another example'.

When the base has other notes besides the pedal-note, in form of *arpeggios* [or broken chords,] these notes must always be essential notes of the chords set above, for example:

9. In D major.

Pedal on the tonic.

Tonic.

Pedal on the dominant.

Dominant.

In this example [Nº 9.], the base plays a double part; for its upper notes form a middle part, without which the chords would be too incomplete, whilst the lower note (the A) makes the organ-point.

10. In D minor. Pedal on the dominant, with *appoggiaturas*.

There may be very short organ-points—sometimes of a single measure: we shall call them *transient pedals*.

They may take place on every new tonic brought in by a regular modulation. Here is a phrase, with three transient pedals, which may serve as an example.

11. In C major.

131

Subject.

Transient tonic-pedal, on C. Transient tonic-pedal, on D. Transient tonic-pedal, on G.

On these short and transient organ-points, only the dominant seventh and triad of the tonic are placed.

Sometimes a prolongation of the tonic and of the dominant at the same time is met with: this is not, as might be thought, a double organ-point. The tonic alone is then the pedal, the dominant being but a holding-note which must be an essential note in all the chords following:

12.

Holding note (G.)

Pedal on the tonic (C.)

In this case, the dominant might be quadruple and quintuple taken in the different octaves:

EXAMPLE.

The organ-point is used in pieces in three, four, five, or six parts; in the orchestra, in choruses, &c; but scarcely ever in *duos*. In these, however, it may be very interesting as elsewhere: it is only necessary to make great use of broken chords, because not being able, with a single part, to strike all the notes of the chords simultaneously, they must be made to be heard at least successively.

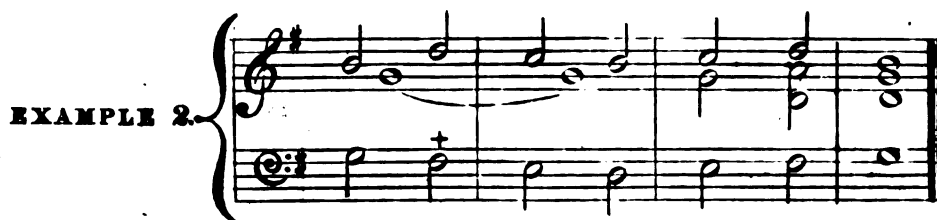
HERE IS AN EXAMPLE.



We have already said that the pedal occurs in the lowest part only of the harmony. This rule is without any exception: there is no pedal in the high parts. The following examples, the only ones tolerable, sometimes met with, must not be regarded as organ-points:

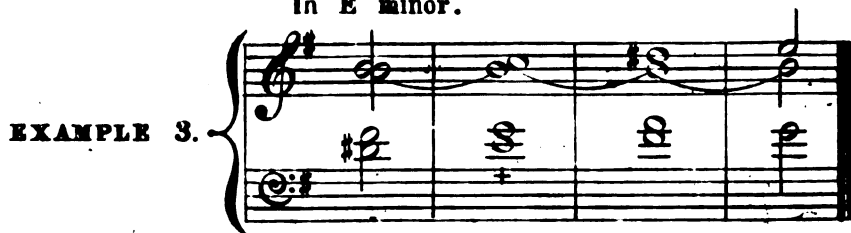


The chord marked + in this example arises from passing-notes, for the three under parts proceed by conjunct degrees. This can be used only in passing from the dominant to the tonic.

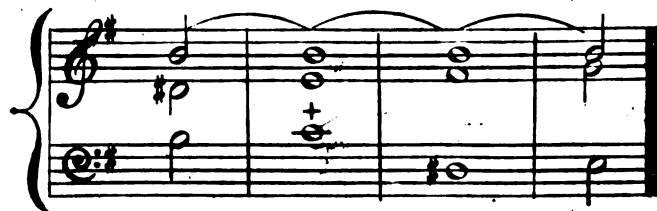


The chord marked + arises likewise from passing-notes.

In E minor.



The same arranged differently.



The chord marked + (in N^o 3.) is a seventh of the fourth kind, which is resolved by exception, not having its prescribed series of chords.

These last two examples can likewise take place only in passing from the dominant to the tonic.

We have collected here all the practicable cases of this pretended organ-point in an upper part.

It has also been attempted to set the dominant seventh, marked here with a cross +, under the tonic; but this has never satisfied a fine ear.



But an essential note, common to all the chords with which it is accompanied, may be prolonged at pleasuse, and be set in any part whatever. Here is a curious and sufficiently rare example of a note of this kind becoming a common note in twelve different chords which may follow one another.



VI. OF ANTICIPATIONS.

The name alone of this kind of accidental note indicates its property. They *anticipate* the essential notes of the chords nearly as syncopation retards them, with the sole difference that they are much less extensively used and that there are very few cases wherein they can be placed with success. It is a method affording but little resource and requiring indeed great care to be taken in order not to produce intolerable harshness.

1. The anticipation must always be an essential note of the following chord:
2. It can have but a very short duration.

We shall give here but a few examples, approved however by experience.

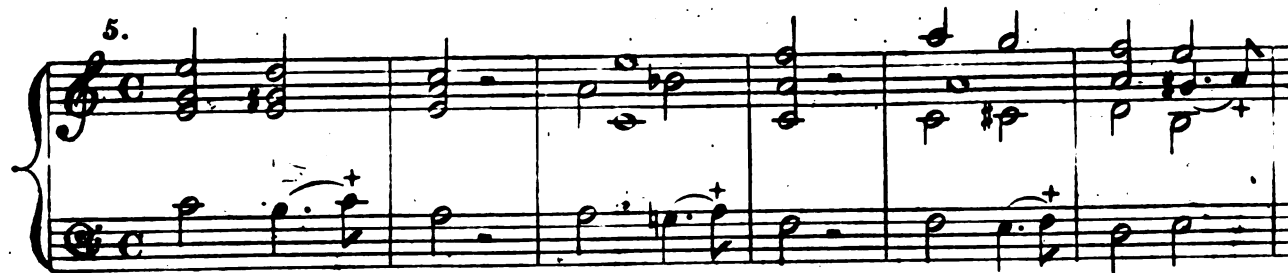
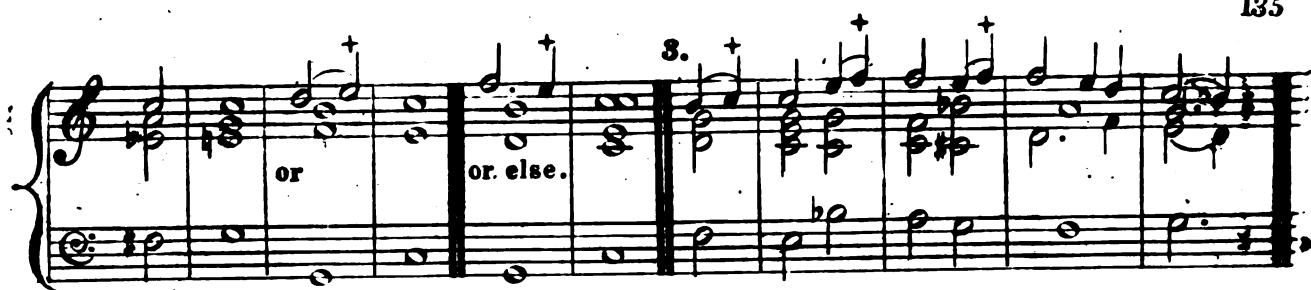
The anticipations are indicated by a cross, (+.)



(73) Organ-points on the dominant and on the tonic may be united, and form "the fullest and most majestic close." Dr. Marx, *Musikalische Kompositionslehre*, p. 201. First part, (or English Edition, published by Messrs. R. Cocks & Co. vol. 1, p. 217.)

EXAMPLE.





These anticipations are good in the melody only, and especially in the upper part.

In the following example, the whole chord is anticipated.



Here I terminate the analysis of the accidental notes.

In order to practise advantageously the use of the accidental notes and modulations, the best method is to take an air or melody of a few measures and conduct it successively through all the relative keys. This may be done in two ways, namely:

1st, By always repeating the air in the same part only, high or low;

2nd, By making it pass successively into the four parts by way of conversation. ⁽⁷⁴⁾

HERE ARE EXAMPLES.

GIVEN MELODY.



No 1.

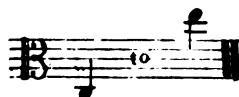
1st Modulation. Air in E \flat .

(74) The following examples are composed for the stringed-quartet, namely, two violins, viola (or tenor) and violoncello. This kind of four-part composition is one of the most useful and practicable; we therefore advise the learner to set his exercises in four-part harmony especially for these four instruments, as by them can be performed plain chords as well as all kinds of passing notes and figures, and as quartett music is in itself one of the most esteemed species of composition and also indispensable in the employment of the full orchestra. Those unacquainted with these instruments

are reminded that the compass of the Violin (in common practice) may be assumed as from



that of the viola from



and that of the violoncello from



Higher notes are used only in concerto-passages &c, but are here to be avoided, as well as double stops, being at present without an object, and requiring a more intimate knowledge of these instruments. — C.

2^d Modulation. Air in B \flat . 3^d Modulation. Air in G minor.

4th Modulation. Air in A \flat . 5th Modulation. Air in F minor.

6th Modulation. Air in the original key.

It is seen that the air is repeated seven times, twice in the original key and once in each of the five relative keys. The same thing may be done if the air be put in any one of the other three parts.

Here is a melody which can be executed by the first treble only:

GIVEN MELODY.



Nº 2. The air constantly in the first treble till the last five measures.

1st Modulation. Air in B.

2^d Modulation. Air in G[#] minor.

3^d Modulation. Air in C[#] minor.

4th Modulation. Air in A.

5th Modulation. Air in F# minor.

Return into the original key.

(75)

In these two examples, the modulations are made with intermediate chords. In the following, they are made without intermediate chords. In order to render this practicable, it is necessary so to order the different relative keys that they shall succeed one another by falling a third, fourth, or fifth.

(75) When the alto (the second under part) is found lower than the base, as here, it must observe the same conditions as the base. — R.

GIVEN MELODY.



No 8.

A three-staff piano accompaniment for the first system. The treble and bass staves are in G major. The right hand plays a melody of eighth and quarter notes, while the left hand provides a simple harmonic accompaniment. The system concludes with a double bar line.

In F# minor.

In D.

A three-staff piano accompaniment for the second system. The treble and bass staves are in G major. The right hand continues the melody, and the left hand provides accompaniment. The system concludes with a double bar line.

In G.

In E minor.

In A.

A three-staff piano accompaniment for the third system. The treble and bass staves are in G major. The right hand continues the melody, and the left hand provides accompaniment. The system concludes with a double bar line.

Return into the original key.

An example wherein the given melody proceeds through all the parts.

GIVEN MELODY.



Nº 4.

In E minor.

In C.

In D,

In A minor.

In B minor.

In G.

In the following example, the modulations are only transient; and although the given melody passes successively into all the relative keys, it seems not to quit the original key.

GIVEN MELODY.



Nº 5.



EXAMPLES ON PASSING-NOTES IN THE CHROMATIC SCALE.

GIVEN MELODY.



Nº 6.





Musical score system 1, featuring a grand staff with treble and bass clefs. The key signature is one sharp (F#). The system contains several measures of music, including a melodic line in the treble and a more complex, arpeggiated line in the bass. The text "In B minor." is written in the right-hand staff, and "In D." is written in the left-hand staff.

In B minor.

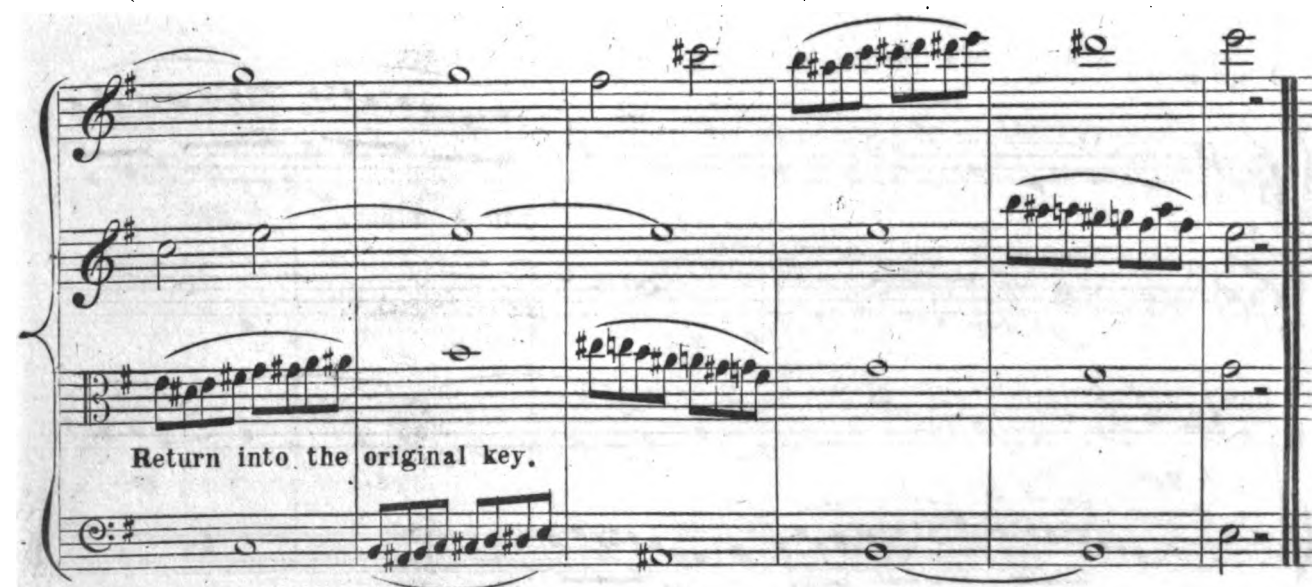
In D.



Musical score system 2, continuing the piece. The key signature remains one sharp. The system shows further development of the melodic and arpeggiated themes. The text "In G." is written in the left-hand staff, and "In C." is written in the right-hand staff.

In G.

In C.



Musical score system 3, concluding the piece. The key signature remains one sharp. The system features a final melodic flourish in the treble and a corresponding arpeggiated pattern in the bass. The text "Return into the original key." is written in the left-hand staff.

Return into the original key.

LESSON ON THE ORGAN-POINT.
GIVEN MELODY SUPPORTING THE PEDAL.

N^o 7.

Pedal on the tonic D. Pedal on the tonic B.

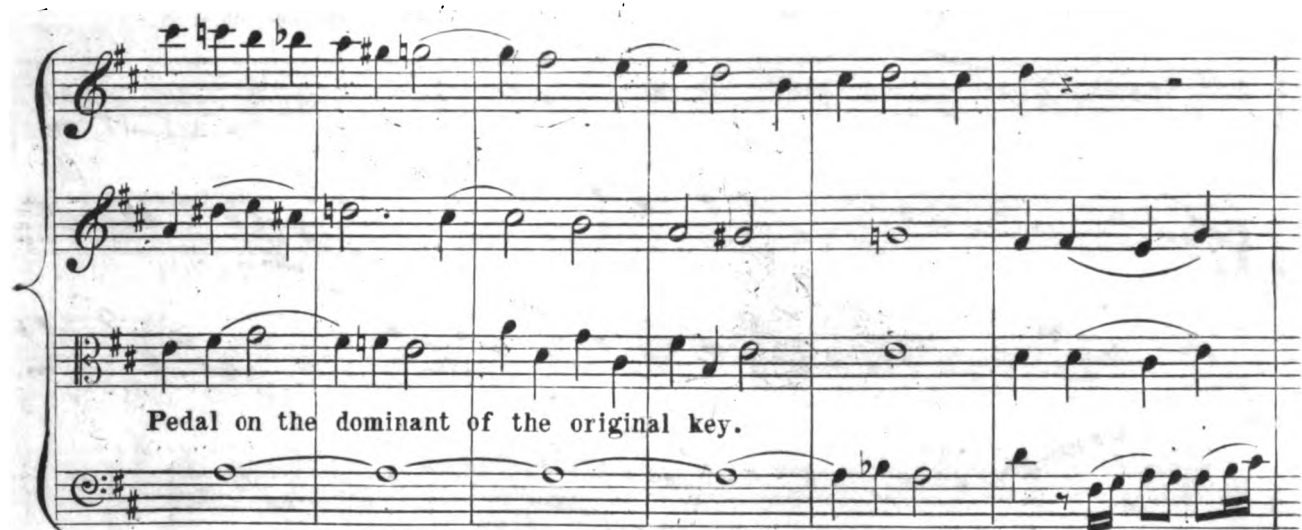
Pedal on the tonic F#.

Pedal on the tonic A. Pedal on the tonic E.



First system of musical notation, featuring a grand staff with three staves. The music is in G major (one sharp). The first staff contains a melody with eighth and sixteenth notes. The second staff contains a more complex melody with sixteenth-note runs. The third staff contains a bass line with quarter and eighth notes. A text annotation "Pedal on the tonic G." is placed below the third staff, indicating a sustained G note in the bass.

Pedal on the tonic G.



Second system of musical notation, continuing the piece. It features the same grand staff and key signature. The melody in the first staff continues with various note values. The second staff has a more active line with many sixteenth notes. The third staff continues the bass line. A text annotation "Pedal on the dominant of the original key." is placed below the third staff, indicating a sustained D note in the bass.

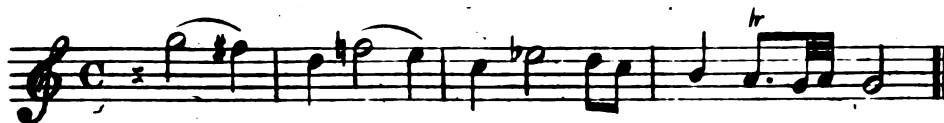
Pedal on the dominant of the original key.



Third system of musical notation, concluding the piece. It features the same grand staff and key signature. The first staff ends with a final cadence. The second staff has a more active line with many sixteenth notes. The third staff continues the bass line. The system ends with a double bar line.

The following passage of melody begins and terminates with the dominant of the key.

GIVEN MELODY.



Nº 8. In C major.

Handwritten musical score for No. 8. in C major. The score is organized into three systems, each consisting of three staves. The first system uses a treble clef for the top staff, an alto clef for the middle staff, and a bass clef for the bottom staff. The second system uses a treble clef for the top staff, an alto clef for the middle staff, and a bass clef for the bottom staff. The third system uses a treble clef for the top staff, an alto clef for the middle staff, and a bass clef for the bottom staff. The notation includes various musical symbols such as notes, rests, and accidentals. The manuscript is on aged paper with some staining.



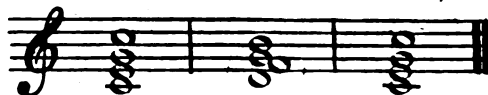
In all this elaboration, the parts are allowed from time to time to cross each other; sometimes indeed this is a matter of necessity, in order to avoid forbidden octaves and fifths, and false relations, as well as to disengage a singing part from the notes which accompany it, and which by surrounding it too closely might injure its effect. (16)

(16) The learner ought to set himself very many tasks of this kind, according to the models of the preceding examples, and carry them out in all the ways given. Here he may already exercise his judgment upon the fruit of his own invention, choosing for himself every sort of time and scale, as well as every degree of movement, subject, and figurate passage proper for such elaboration. It is obvious moreover that he may, with not less advantage, write similar examples for the pianoforte, where even the greatest possible extension of the ten fingers limits the harmony to a closer position, as well as for the organ, and the four vocal parts—soprano, alto, tenor, and base.—C.

OF BROKEN CHORDS

Chords may be exhibited in two ways, namely —

1st By striking simultaneously the notes of which they are composed, as:



These are called plain chords, (*Accords plaques.*)

2nd By making the same notes heard one after another, as:



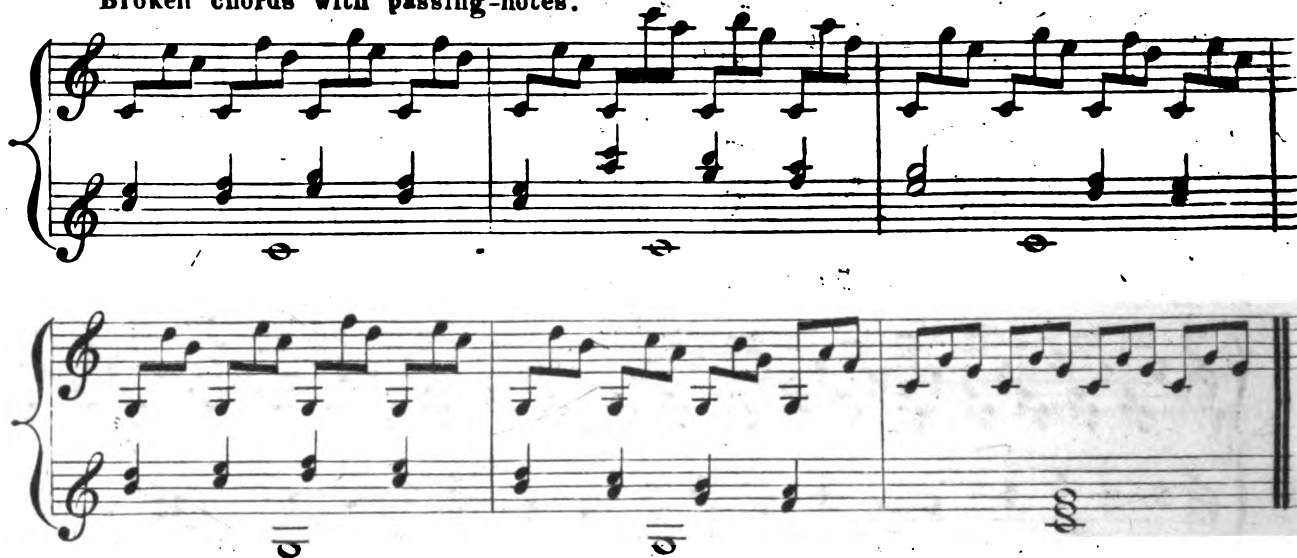
These are called broken chords.

This second modification is remarkable on this account, that a single part is sufficient to render what, in the first, would require four parts. This method shews the possibility of executing harmony with a single instrument.⁽⁷⁷⁾

Broken chords play an important part in modern music, in which they are treated not only with essential but also with accidental notes. Passing notes, appoggiaturas, suspensions, and even the organ-point may occur in broken chords.

Here are some examples in which the upper stave contains broken chords, and the under stave the notes of these chords struck simultaneously.

Broken chords with passing-notes.



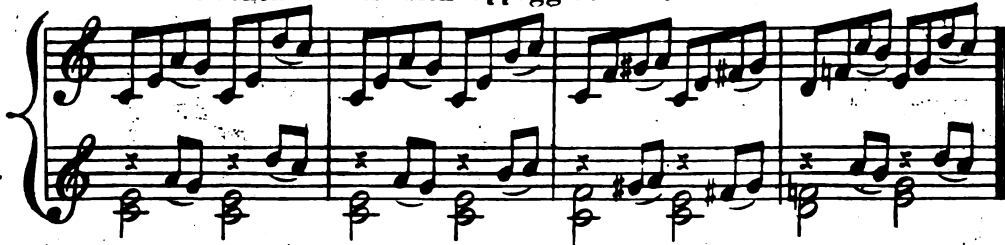
The same chords might be broken in the following manner also:



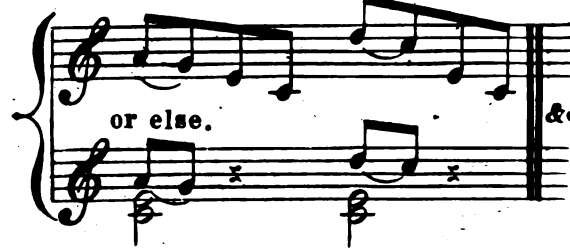
⁽⁷⁷⁾ Even with a flute, which can produce but one sound at a time. — M.



Broken chords with appoggiaturas.



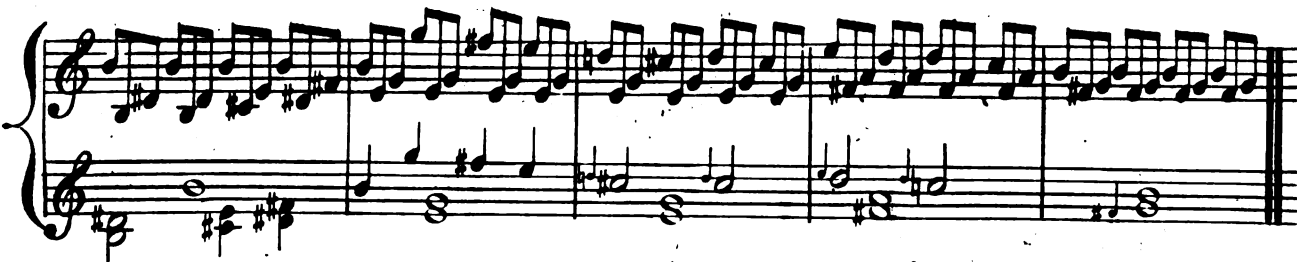
The preceding chords might also be broken in the two following ways:



ANOTHER EXAMPLE.



Broken chords with passing notes and appoggiaturas.



Broken chords with suspensions.

The musical score is a piano exercise titled "Broken chords with suspensions." It consists of six systems of music, each with a treble and bass staff. The right hand plays a continuous eighth-note arpeggiated pattern, while the left hand plays broken chords with suspensions, indicated by numbers 3, 4, 5, 6, 7, and 9. The key signature has one sharp (F#).

System 1: Treble staff has eighth-note arpeggios. Bass staff has chords with suspensions: 9-3, 7-6, 4-3, 5-6, 7-6.

System 2: Treble staff has eighth-note arpeggios. Bass staff has chords with suspensions: 5-6, 4-3, 7-6.

System 3: Treble staff has eighth-note arpeggios. Bass staff has chords with suspensions: 7-6, 7-6, 4-3, 4-3, 4-3.

System 4: Treble staff has eighth-note arpeggios. Bass staff has chords with suspensions: 4-3, 4-3, 7-6.

System 5: Treble staff has eighth-note arpeggios. Bass staff has chords with suspensions: 5-6, 4-4, 5-6, 4-4.

System 6: Treble staff has eighth-note arpeggios. Bass staff has chords with suspensions: 5-6, 7-6, 6-7.

Broken chords with organ point.

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The image displays four staves of musical notation, each representing a different harmonic exercise. The first staff is labeled "Pedal on the dominant." and the second staff is labeled "Pedal on the tonic." The notation includes treble and bass clefs, a key signature of one sharp (F#), and various musical symbols such as notes, rests, and accidentals. The third and fourth staves continue the exercises with similar notation.

By comparing with attention the two staves of this example, it will be seen that the broken chords must be treated nearly the same as the plain chords. In the use of both, the suspensions, as well as the other discords requiring preparation and resolution, must be regularly prepared and resolved. It must also be observed not to leave in suspense the passing-notes and appoggiaturas, which must, as we have said, always bear upon essential notes.

GENERAL RULE .

In order to treat broken chords properly, they must be represented as being plain: if, in this latter case, they are faulty, they will be so if broken. The same rule applies to broken chords accompanied by a base.

Nº 1.
EXAMPLE.

The image shows a musical example labeled "Nº 1. EXAMPLE." and "Bad." The notation consists of a treble clef staff and a bass clef staff. The treble staff contains a series of notes, while the bass staff contains a single note. The notation is marked with a double bar line at the end.

This example is bad, because it contains forbidden octaves. To be certain of this, the chords must be represented in the following manner:

Nº 2.

These two examples may be rectified thus:

Nº 1.

Nº 2.

When a melody is correctly accompanied by plain chords, it will be equally so on breaking the same chords, although, by the meeting of notes of the melody with those of the harmony, we may sometimes perceive there two octaves, two fifths, two sevenths, or two seconds in succession.⁽⁷⁸⁾

(78) So, for example, the following theme is not in itself incorrect, although the quavers in

both staves form fifths, sevenths and octaves with each other. When the under accompaniment is taken in plain chords, as follows, it is perfectly correct.

Yet the composer should endeavour to avoid these likewise, especially in slow time, by choosing a more suitable form of accompaniment while breaking the chords. — C.

Compare the two following examples:

Nº 1.



Nº 2.



In Nº 1, the melody is accompanied by plain chords, and in Nº 2, it is accompanied by the same chords broken. Since the accompaniment of the first of these two examples is good, that of the second must be so likewise. It is remarkable that the harmony of Nº 2 is as full and as rich as that of Nº 1, although written in two parts only: such is the nature of broken chords.

If all has been well understood that we have said on the nature of chords, their peculiarity and enchainment, on modulations, on what constitutes a good base, on the six kinds of accidental notes and broken chords, we should be in a condition to solve the three following propositions:

1. To find the base and harmony to a given melody.
2. To accompany with harmony a given base, without its being figured.
3. To analyse a piece of music, of any kind whatever, with reference to the harmony, and account for it, namely, distinguish the essential from the accidental notes,

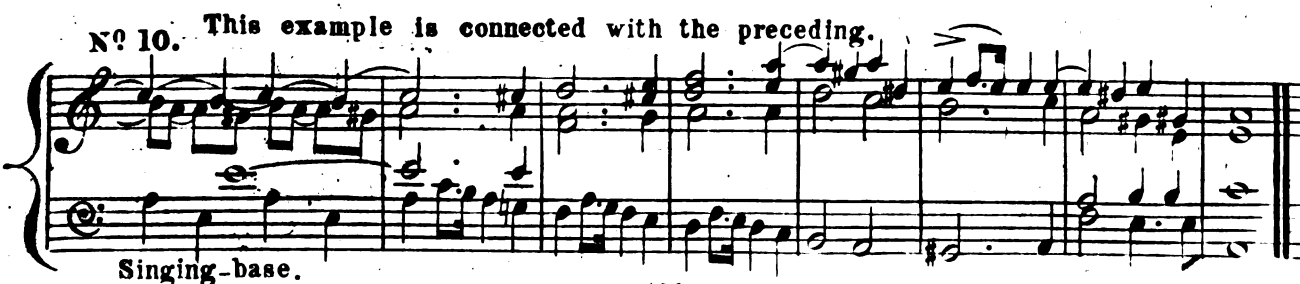
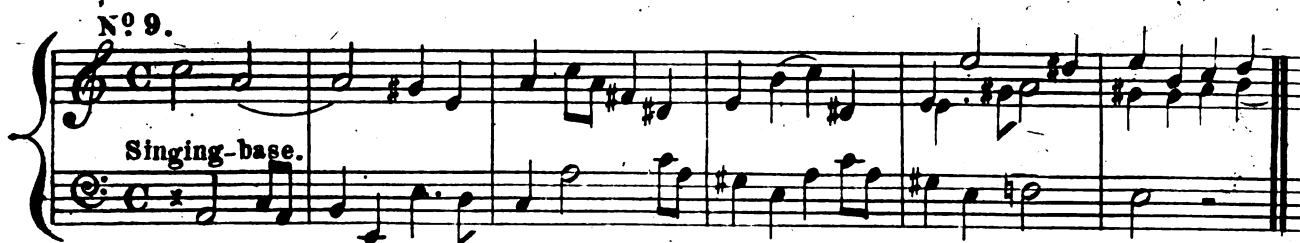
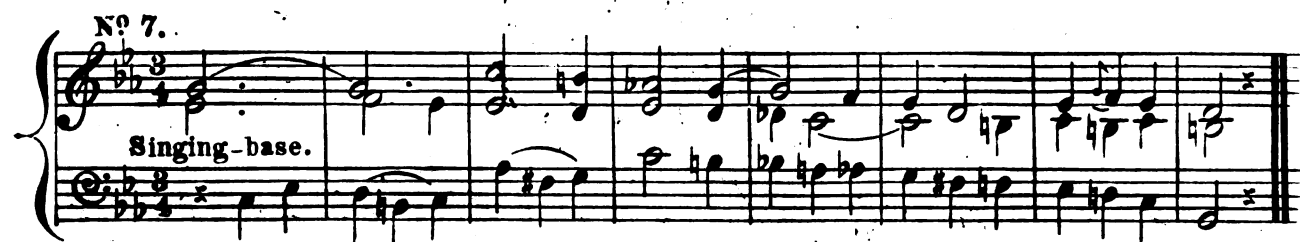
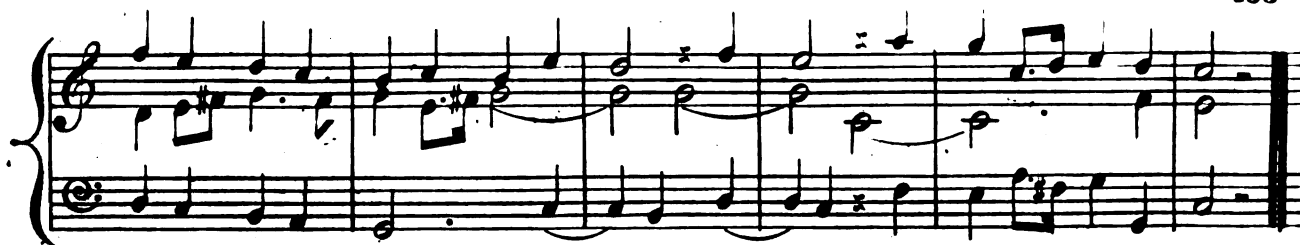
and shew to which species every accidental note belongs, determine the number of its chords by the radical notes, and shew the species of every chord.

- I. Many a melody may be capable of receiving several bases and several harmonies all equally good; another, on the contrary, may offer a great many difficulties and one has sometimes trouble to give it a very free base and a natural and correct harmony. It is in this last case that it is of importance to understand well the employment of the accidental notes, of which the melody may contain a great number, especially if it be very much embellished. Merely to be able to distinguish how many notes in a melody may be considered as accidental notes is already a great advantage; for there are melodies in which their number greatly exceeds that of the essential notes. The more a melody can contain of accidental notes, the more the harmony of it will be clear and simple, because the number of chords will be less. (79)
- II. In order to accompany an unfigured base with harmony, attention in like manner must be paid to the accidental notes which that base may contain. We do not here consider those heavy bases which proceed in semibreves or minims only; but those which sing, or which at least contain subjects or phrases of melody, those finally which are at once a *singing-part* and regular bases of the harmony set above them. It is this double character which renders them much more difficult to accompany than a melody executed by the higher part.

We shall give here some examples by way of pattern:

The image contains four musical examples, each consisting of a treble staff and a bass staff. The bass staff is labeled 'Singing-base.' and the treble staff contains the harmony. The examples are numbered Nº 1, Nº 2, Nº 3, and Nº 4. Each example is in C major and 4/4 time. Example 1 shows a simple harmonic setting. Example 2 shows a more complex, flowing melody. Example 3 shows a melody with many accidentals. Example 4 shows a melody with many accidentals and a more complex harmonic setting.

(79) See for the development of this article the *Treatise of Melody*, which forms the second general part of this work. *R.*





It is in this manner that this species of labour must be practised. For this purpose every sort of melodious passage may be taken, provided it be not of that embellished kind which produces no effect in the base.

III. The following is the method which we propose to learners who would analyse with advantage the productions of celebrated composers:

1. Disengage the piece to be analysed from its accidental notes, by setting apart, the essential notes alone.
2. On another stave, place the roots of the chords.
3. Afterward compare the original piece with that which contains the essential notes alone; then examine the progression of the roots, in order to see how the different chords are connected.

This exercise, repeated, offers to learners a crowd of remarkable cases with reference to the enchainment of chords, of modulations, of the various resources in the use of accidental notes, as well as of the distribution of the parts, which in the course of time are eventually engraven in the memory. At the end of the third part will be found a pattern of this analysis.⁽⁸⁰⁾

(80) The easiest pianoforte-works of Haydn, Mozart, Clementi, and other authors of the same period, may be taken in hand by the learner as the most suitable for the beginning of this analysis. By degrees he is to proceed to the more difficult, the magnificent as well as also to newer composers, as Cramer, Dussek, Hummel, Beethoven, &c, but always progressively, until at length he can undertake also works with accompaniments, trios, quartets, concertos, symphonies, all which however the learner himself should first write in score.— C.

See Czerny's School of Practical Composition in 3 vols: folio (translated by Mr John Bishop of Cheltenham) which contains a large collection of models for the young composers' study and imitation: published by Messrs Cocks & Co, London.— M.

OF FORBIDDEN OCTAVES AND FIFTHS.

It is not yet known why fifths in succession by similar motion produce a bad effect. In order to explain it, it would be necessary to know exactly the physical influence exerted on the ear by the succession of the sounds, of the intervals, of the chords and scales; but this influence not being known, and what might be said on this subject offering but hypotheses, we shall abstain from speaking of it. As to consecutive octaves by similar motion, they act differently upon the organ of hearing since it can bear them. They produce a bad effect only when they occasion an unsuitable vacancy to be felt in the harmony offending the ear. These octaves are not therefore, like the consecutive fifths, bad in themselves. Experience points out the cases in which these or those produce a bad effect and where they are tolerable. In order not uselessly to restrict the harmony, which has besides to contend against so many other difficulties, it will be sufficient simply to indicate each of these cases.

By forbidding in treatises the fifths and octaves by similar motion, no other object was aimed at than to avoid their bad effect; hence, then, when they cease to be disagreeable to the ear, the prohibition has no longer a legitimate cause.

The following successions are called hidden fifths and octaves:

Hidden fifths.	Hidden octaves.

because, by varying one or the other part by passing-notes, two real fifths or two real octaves result by similar motion.

EXAMPLE.

In order to avoid them, the following rule is established: *From a perfect or an imperfect concord we must not go to a perfect concord by similar motion:* in other words, two parts which already form a fifth, an octave, a third, a sixth, or a fourth, must not rise nor fall, at the same time, on a fifth or an octave.

This rule has a great many exceptions: it is impossible to follow it rigorously in practice, as is proved evidently by the scores of all the great masters. It has therefore been necessary for me, in order to shew learners the methods of avoiding real faults, to bring the allowed exceptions under particular rules.

1. From a third to a perfect fifth:

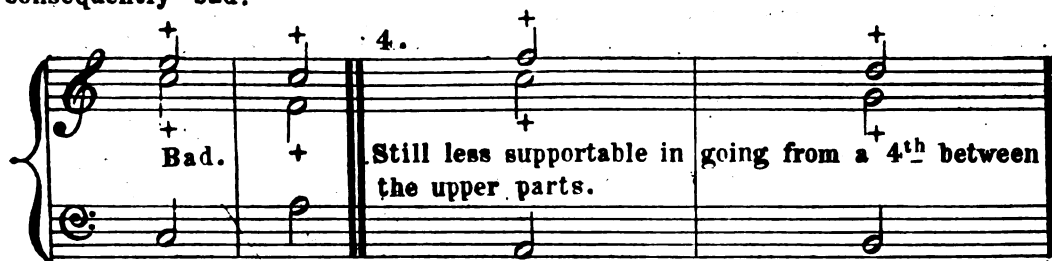
It may be arrived at by similar motion in descending only, and by taking care

that the upper part falls but a second. The roots of both chords make a *fourth below*. This exception may take place between two upper parts, as well as between an upper part and the base.

EXAMPLES.



Here are two examples in which the same conditions are not observed, and which are consequently bad:

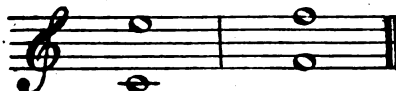


But we may do as follows:

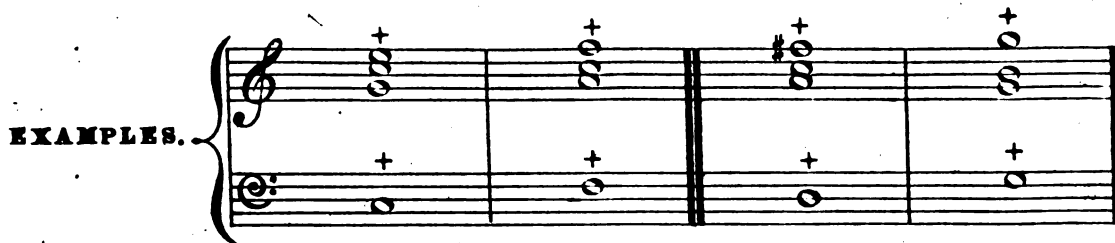


because the F is only an ornament of the melody which does not reckon in the harmony.

From a third to an octave:



This is the only exception allowed which is practicable, between the base and an upper part in rising only, and when the roots make a *fourth above*, and besides the two chords must be *without inversion*.

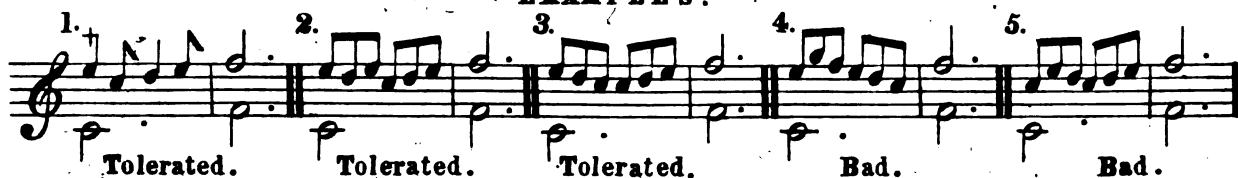


Wherever these conditions are not fulfilled, there is a fault.



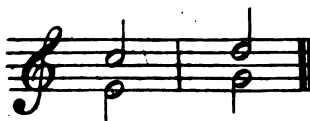
When the melody varies the note which forms a third with the base, care must be taken to avoid making two hidden into two direct or real octaves.

EXAMPLES.



The fifth example is bad, because it is the octave which is varied and not the third. In all these cases, it is evident that it would always be preferable, when it could be done, to make the base fall; but, in the succession of chords, one is not always at liberty to make such or such a part fall or rise at pleasure, because it often occurs that the scale of the voices or instruments will not admit of it. In treatises, it is always easy to avoid hidden octaves, but that is not always possible in practice.

2. From a sixth to a perfect fifth:



We may go from a sixth to a perfect fifth by rising only, and when the upper part ascends but one degree, especially when the roots of the two chords form a fourth downwards. The succession of these two intervals is practised equally between the base and an upper part or between two upper parts.



If the upper part made a skip of a third or fourth, instead of rising a second only, the practice would be bad.



(81) Excepting the case wherein E in the second measure would be an appoggiatura, for example:



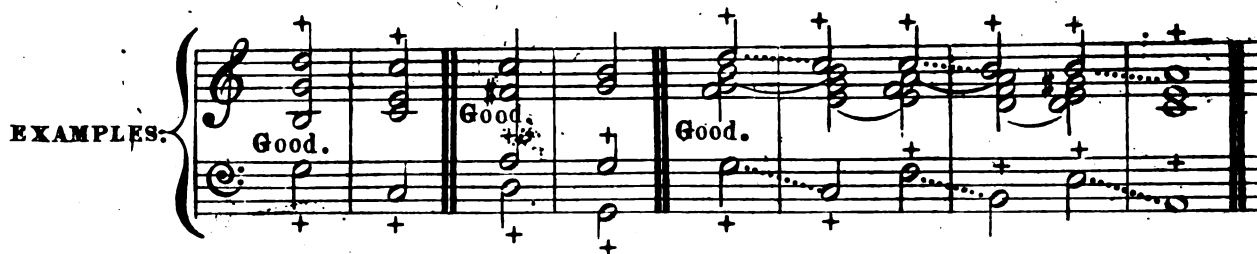
: From a sixth to an octave: this case is impracticable by similar motion.



3. From a fifth to an octave:



This case is not practicable but between the base and an upper part, and *always* in *descending*. It is necessary besides that both chords be without inversion, and that their roots form a *fifth downward*.

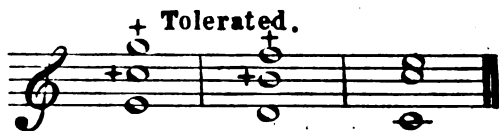


The two following examples are bad, because the prescribed conditions are not observed in them:



OBSERVATIONS ON THE SUCCESSION OF TWO FIFTHS.

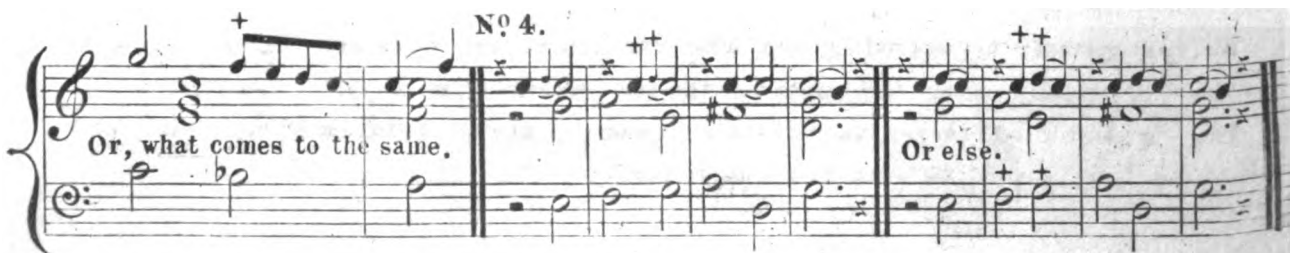
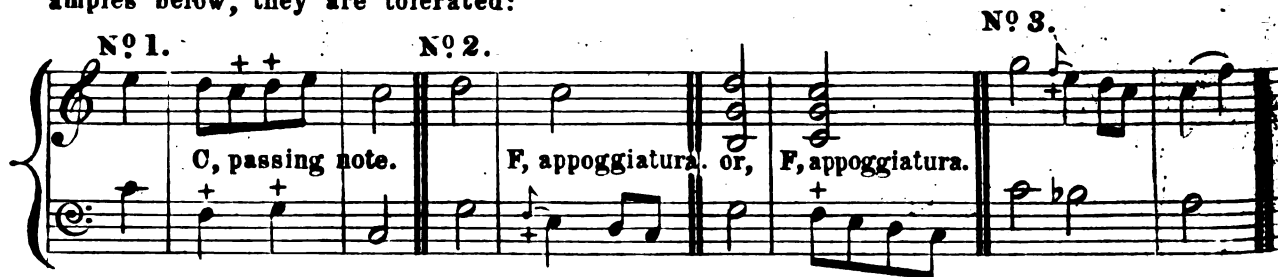
We may go from a perfect to a diminished fifth:



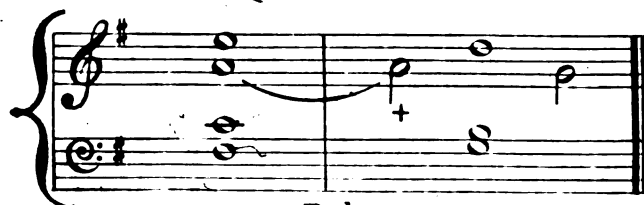
The contrary
is bad:



We cannot go from one perfect fifth to another by similar motion; yet, when they are made by means of a passing-note or of an appoggiatura, as in the examples below, they are tolerated:



In the succession of one fifth to another, the retardation of the second (+) does not prevent the fault,



Bad.

This example is bad, because the prolonged note which suspends the second fifth, is an *accidental note* representing G; therefore the two fifths exist; but it is not the same with the following example, in which the same note is an *essential note*.



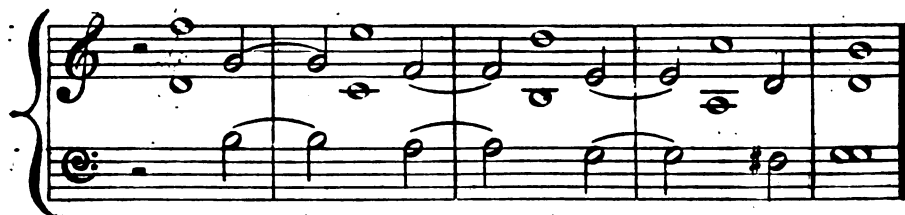
Good.

The prolonged note (A) is here an *essential note* of the chord of the dominant seventh, in its first inversion; it therefore does not represent the G which follows it: it is for this reason that the following examples are good although there is, in appearance, a succession of retarded fifths.

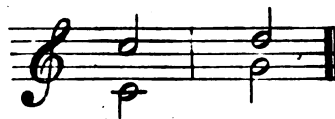
Sequence of sevenths, in three parts. In four parts.



ANOTHER EXAMPLE.



4. From an octave to a perfect fifth:



We can go only by ascending and when the upper part rises one degree only, which is done principally when the roots of the two chords form a *fifth upwards*.

The succession of these two intervals commonly occurs between a high part and the base, very rarely between two upper parts.

EXAMPLES.

Good. Good. Good. Or, +

Between the base and an upper part. The same. Between two upper parts.

The following examples are bad, because these conditions are not fulfilled:

Bad. Bad. (ss)

OBSERVATIONS ON THE SUCCESSION OF OCTAVES.

Two or several octaves in succession may take place, but, in this case, it must be readily inferred from them that such has been the composer's intention, as in the example below.

ANOTHER EXAMPLE.

(ss) Excepting when the E in both examples is a note of embellishment.

EXAMPLES.

Good. Good. R.

This page contains three systems of handwritten musical notation for piano. The first system consists of four staves (treble and bass clef on the left, two staves on the right) with various notes, rests, and dynamic markings such as *f* (forte) and *p* (piano). The second system also consists of four staves, featuring more complex rhythmic patterns and dynamic markings. The third system consists of three staves, with the middle staff showing a dense, rapid sequence of notes. The notation is in a historical style, with some ink bleed-through visible from the reverse side of the page.

In the accompanying of a predominant melody, as an air, an instrumental solo, a romance, &c., it is allowed to make real or hidden octaves between that melody and the parts of accompaniment, provided it be not with the base. The parts of accompaniment must be written with purity in regard to one another.

EXAMPLE.

Melody.

Accompaniment.

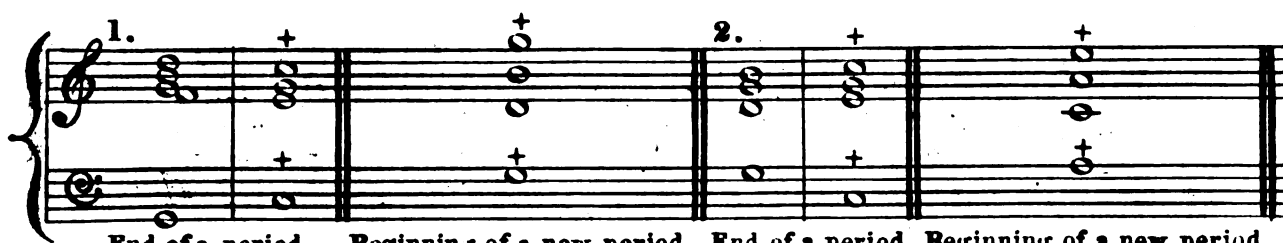
ANOTHER EXAMPLE.

(83) Since the bad progressions of fifths and octaves are not always strikingly audible in the middle parts, the scholar must, if writing a passage in several parts, not only well examine the correct progression of the upper parts in relation to the base, but also of the middle parts in reference to one another. This will be best accomplished, if he always separates two individual parts, playing them through together and comparing for example, the base first with the tenor, then with the alto, then with the soprano; afterward the tenor with each of the two higher parts, and lastly the alto with the soprano. By this means he becomes at the same time attentive that every part proceeds as much as possible in a natural melody and makes no unnecessary and bad skips. — C.

PARTICULAR REMARKS.

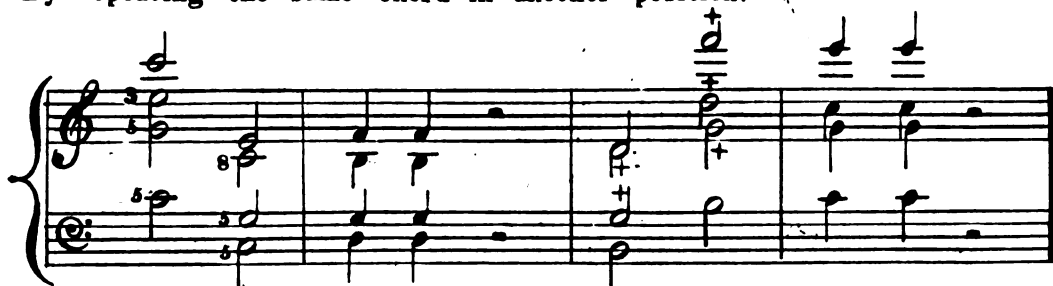
There are cases in which two hidden or real fifths or octaves in succession may be used and by similar motion: here are some examples:

1. After a perfect cadence,—namely, between the last chord of a period and the first chord of the following period:



End of a period. Beginning of a new period. End of a period. Beginning of a new period.

2. By repeating the same chord in another position:



3. By repeating the same phrase either in another octave, or with another distribution of the parts or in another key:



The same phrase in the octave.



The same phrase with a different distribution of sounds.



The same in another key.

4. By employing broken chords, provided the harmony be correct when the same chords are struck plain.

1. Melody. Plain chords. Broken chords. Tolerated. Ditto.

2. 5 5

3. 8 8 5 8 5 5 8 5 8 7 8

Ditto.

If, in changing broken chords to plain ones, octaves or fifths were found, they would be faults.

Bad. This example is bad, because, by taking the chords plain, we should have

Bad.

But when the very same octaves occur between the melody and a middle part, they are tolerated, according to what we have said before on a predominating melody accompanied. Thus the following example would be good:

Good. or else. Good.

In the following example, there are hidden octaves in appearance; but they are avoided, because the position of the first, third, and fifth chords partially change before their resolutions:

In this example, we have pointed out the apparent octaves by 8..8, and the intervals by which they are avoided by 6..8.

What follows is always bad and must be carefully avoided:

This comes to

Where the two fifths are quite visible.

It is the same with the following example:

Which comes to

But the following examples are good:

A rest does not prevent the fault of two octaves or two fifths.

EXAMPLE.

The second chord remaining the same till its resolution although with a rest, has the same effect as if sustained thus:

The same example corrected.

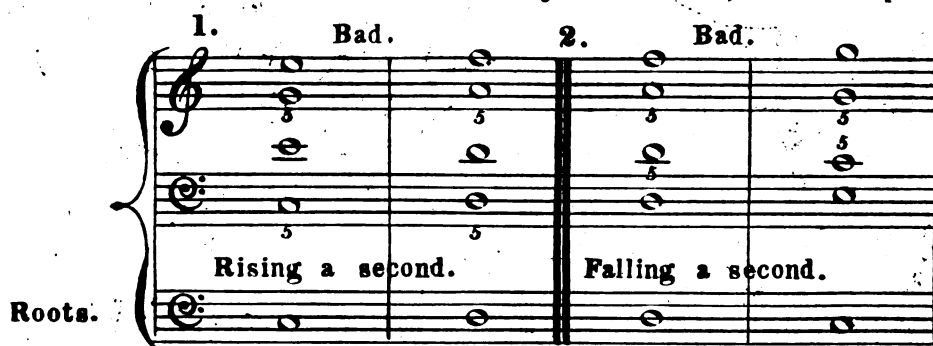


If one wished to strike the chord in the second measure but once, it should be set thus:



Almost always, there are several methods of avoiding similar faults.

It is especially necessary to be careful as to the fifths and octaves in the succession of chords when the roots *rise or fall a second*, for example:



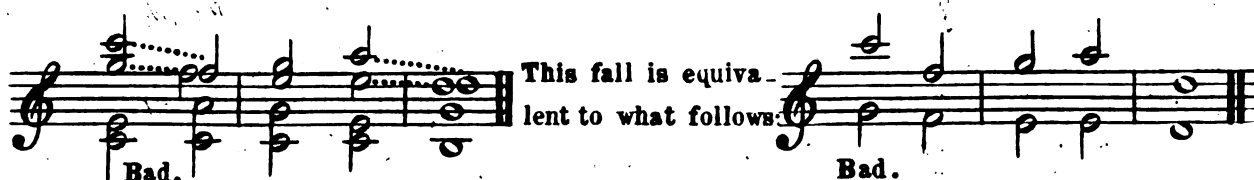
To avoid the two fifths in this succession, it is necessary, 1st to make the fifths of the first chord fall; 2^{ndly}, to go to the fifth or to the principal note of the second chord by contrary motion.

This rule is infallible.

The same examples rectified:



It is also necessary to avoid falling on the unison, by similar motion, from any interval whatever:



In accompanying a melody, it is often difficult to avoid prohibited hidden octaves; but a skilful harmonist almost always finds means of doing so. Here is an example presenting that difficulty and in which the octaves are pointed out by crosses ++.



By changing the base-note of the first chord of the third measure, it would be easy to avoid the two hidden octaves; but if, in this example, it be desired to retain the same base-note, the only method is then to modify the harmony in the second measure, and this is practicable only in the following manner:



OF FALSE RELATIONS .

When on repeating a note it is raised or lowered a semitone, and when this alteration is not made in the same part, a disagreeable harshness results which is called a *false relation*.



To rectify these examples, they must be written in the following manner:



By changing a minor into a major chord or a major into a minor chord, this fault is often committed, but is easily avoided by observing merely to retain the altered note in the same part.

EXAMPLES.

Good. Good.

The same rule is to be observed, when a note common to two different chords is found altered in the latter chord.

EXAMPLES.

Good. Bad. Bad. Good.

It frequently happens that the note wished to be altered in pitch is doubled (or occurs in two parts): as a double alteration cannot be made without producing two forbidden octaves, the two parts must be made to proceed by contrary motion, making one of them fall one degree.

EXAMPLES.

1. Good. Or 2. Good. 3. Good. 4. Good.

When the notes have a sufficient duration, the false relation may be avoided by taking, in one of the two parts, an intermediate note before making the alteration.

EXAMPLES.

Intermediate note. Intermediate note.

TOLERATED FALSE RELATIONS.

Nº 1.

This case is tolerated, because the notes marked with crosses (+) are considered as appoggiaturas, without which the phrase would be as follows:



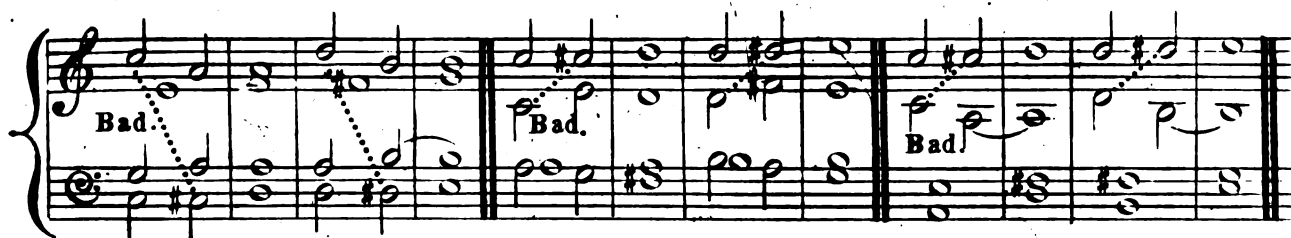
Nº 2.



Tolerated.

This example may have place, when the false relation is heard between the base and an upper part. It would be bad if it took place between two upper parts, or between a high part and the base.

EXAMPLES.



Nº 3.



Although Nº 3 is tolerated, I do not advise the use of it, being in bad taste; it is a great deal better to write in the following manner, by changing the harmony.



The false relation is moreover tolerated, sometimes after a perfect cadence, namely, between the last chord of one period and the first of a new period.



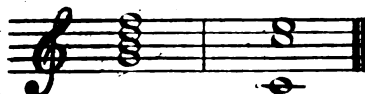
End of a period,
in A minor.

Beginning of a new period in A major.

REMARKS ON THE EXCEPTIONS IN THE RESOLUTION OF DISCORDS.

A discord is resolved regularly, when its root makes with the root of the following chord a *fifth below*, as we have said in analysing this kind of chords.

EXAMPLE.



An exception is therefore made whenever this principle is departed from.



In these examples the dominant seventh is resolved in three different ways, and the roots, instead of forming a fifth downwards [G, C,] make in

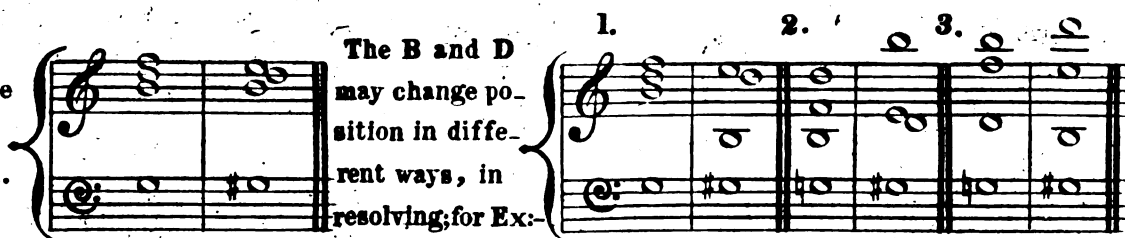
N° 1, a major second above, (G, A;)

N° 2, a minor third below, (G, E;)

N° 3, a minor second above, (G, A^b.)

These kinds of exceptions are allowed; but they must be made with judgment. In order not to commit faults in this kind of resolutions, the notes of the one chord must be kept as near as possible respectively to the notes of the other; in other words, the parts, in resolving, must rise or fall by seconds only, as above. However, when there are notes which are common to both chords, those notes may change position, as we have remarked in the first part.

Thus in the following succession.



But in all these examples, the seventh [F] must fall one degree in the same part, and the G rise a semitone in the base.

This rule is applicable to all exceptions of this kind; for, without it, there would exist isolated chords only, producing no harmony. All the discords do not submit with the same facility to the like exceptions: the dominant seventh and the diminished seventh are those discords which offer the greatest. Examples of these we have already given in the course of this work, especially in speaking of the interrupted cadences and modulations. Here are a few examples on some other discords:—

Chord of the seventh of the second species marked by a +.

Nº 1. Nº 2. Nº 3.

Exception. Half Cadence. Exception. Half Cadence.

Nº 4. Nº 5.

Exception. Perfect Cadence. Exception. Perfect Cadence.

Chord of the seventh of the third species.

Nº 1. Nº 2.

Exception. Exception.

Nº 3. Nº 4. Nº 5.

Exception. Exception. Exception.

Chord of the seventh of the fourth species.

Nº 1. Nº 2.

Exception. Exception.

These two exceptions are tolerated but only in passing from the dominant to the tonic.

Chord of the major ninth.

Nº 1. Nº 2.

Exception. Exception.

N^o 1.

Chord of the augmented sixth.

N^o 2. N^o 3.

The chord of the augmented fourth and sixth offers not a single good exception, unless it be that it can be changed into a chord of the augmented sixth.

EXAMPLE.

The practicable exceptions in the resolution of the diminished triad, the chord of the augmented fifth, and the chord of the augmented fifth with the seventh are pointed out in the analysis which we have made of those chords.

All these exceptions, although good in themselves, may however produce a bad effect, when they are badly employed: as to this point, there is no certain guide but the ear and musical feeling.

OF DISCORDS AFTER A PERFECT TRIAD.

Perfect triads requiring no resolutions like discords, their employment offers greater resources; for every chord of the classification may immediately follow them.

We have said, in the first part, in what way they are connected together: it remains to point out how they may be followed by discords.

All the discords may succeed a major triad, and only nine, a minor triad. The two excluded are, 1st, the chord of the augmented fifth, 2nd, the same with the seventh.

HERE ARE EXAMPLES.

1st Commencing with a major triad.

1. Diminished triad. 2. Chord of augmented fifth. 3. Dominant seventh.

4. Seventh of 2^d kind. 5. Seventh of 3^d kind. 6. Seventh of 4th kind.

7. Major ninth. 8. Minor ninth. 9. Chord of augmented sixth.

10. Chord of augmented 4th and 6th. 11. Chord of augmented 5th with 7th.

2nd Commencing with a minor triad.

1. Diminished triad. 2. Dominant seventh. 3. Seventh of 2^d kind.

4. Seventh of 3^d kind. 5. Seventh of 4th kind.

6. Major ninth. 7. Minor ninth. 8. Augmented sixth.

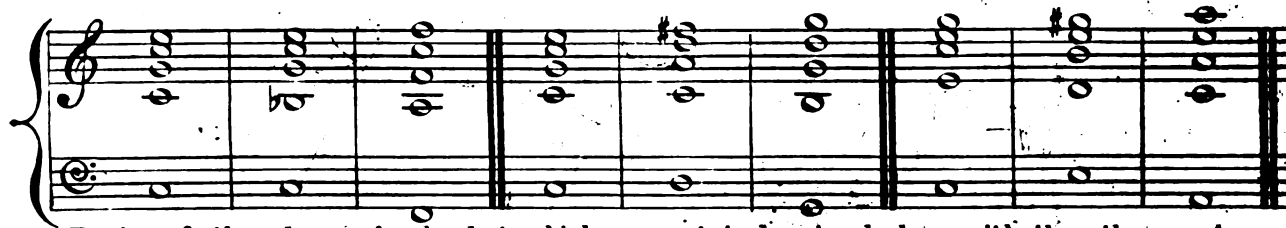
9. Augmented fourth and sixth.

Every chord occurring twelve times in our system, (namely on every one of the twelve sounds forming the twelve semitones of the scale,) it is clear that all chords are not suited to follow one and the same perfect triad, and that a choice must be made. Among chords of the same kind, for example among the twelve chords of the seventh of the fourth species, sometimes only a single one can be found to fol-

low a determined perfect triad, whilst, among those of another species, there are frequently three, four, and more: there are, for example, seven chords of dominant seventh, which may succeed the same perfect triad, as may be seen by the following modulations.

1st Commencing with a major triad.

From C into F. From C into G. From C into A minor.



Roots of the above chords, but which are not to be struck here with the other parts.

From C into B flat. Continuing in C. From C into D minor. From C into E minor.



Roots.

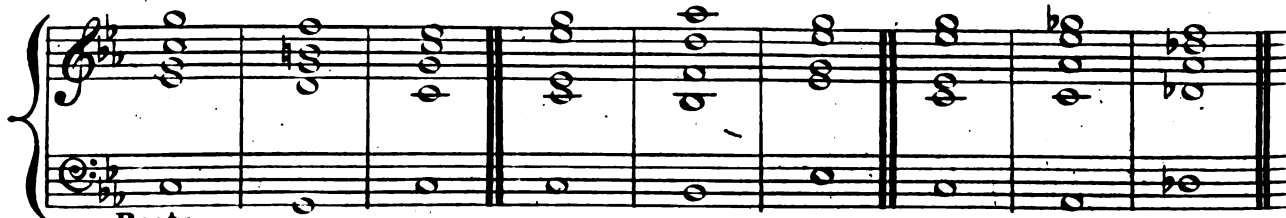
2^d Commencing with a minor triad.

From C into F minor. From C into G minor. From C into A flat. From C into B flat.



Roots.

Continuing in C minor. From C into E flat. From C into D flat.



Roots.

It is only by very great practice that the numerous chances which present themselves in the enchainment of chords can be known.

OTHER OBSERVATIONS ON CADENCES.

(1.) Every perfect cadence may be changed into a half cadence. In order to effect this change, it is only necessary to omit the last chord, and to take care that the last but one be a perfect triad and not a dominant seventh.

EXAMPLE.

Perfect cadence. Half cadence.

(2.) The half cadence may also be changed into a perfect cadence: for this purpose, it is only necessary to add the triad of the tonic without inversion.

Half cadence. Perfect cadence.

(3.) Every perfect cadence becomes a broken cadence if we invert it or if we change the final chord, as we have shewn before.

(4.) A perfect cadence may be weakened by the highest part.

Perfect termination, because the highest part ends on the tonic. Weakened termination by the upper part ending on the mediant. Termination still more weakened by the upper part ending on the dominant.

Perfect cadence. Perfect cadence. Perfect cadence.

(5.) A cadence in which the final chord is preceded by the triad of the subdominant without inversion is called a *Plagal cadence*.

EXAMPLES.

Major triad of the subdominant. Minor triad of the subdominant.

Plagal cadence. Plagal cadence.

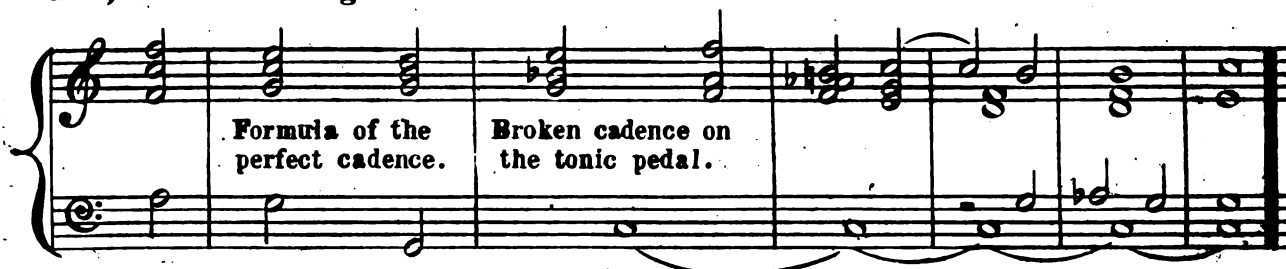
This cadence scarcely occurs in the present day, excepting in church-music, and after the common perfect cadence.

EXAMPLE.

Perfect cadence. Plagal cadence.

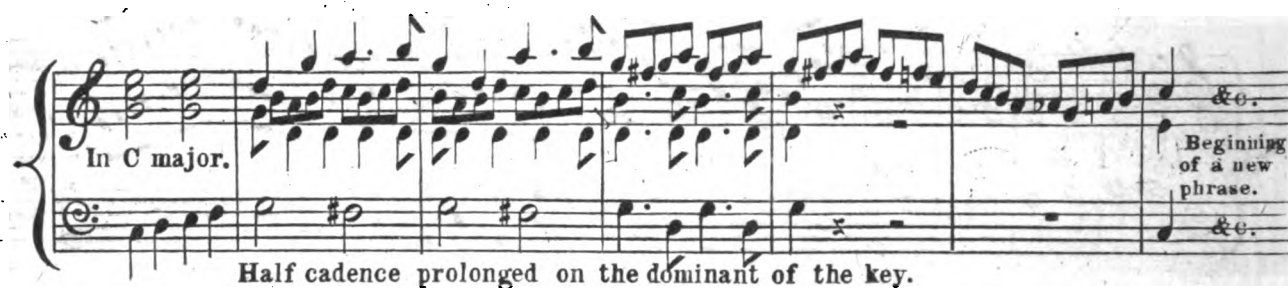
(8*) These last two perfect cadences may be employed in intermediate periods. They are avoided in final periods, unless some intension as to melody render them legitimate. — B.

(6.) When a piece terminates with an organ-point on the tonic, the form of the perfect cadence must precede that organ-point which, in this case, is only a prolongation of the cadence; but the perfect cadence may be interrupted on the pedal-note, in the following manner:



The perfect cadence always terminates the musical period. If it be desired to lengthen this period, (which may very frequently happen,) the perfect cadence must be changed either into a half cadence or broken. A period is shortened by changing the half cadence into the perfect cadence.

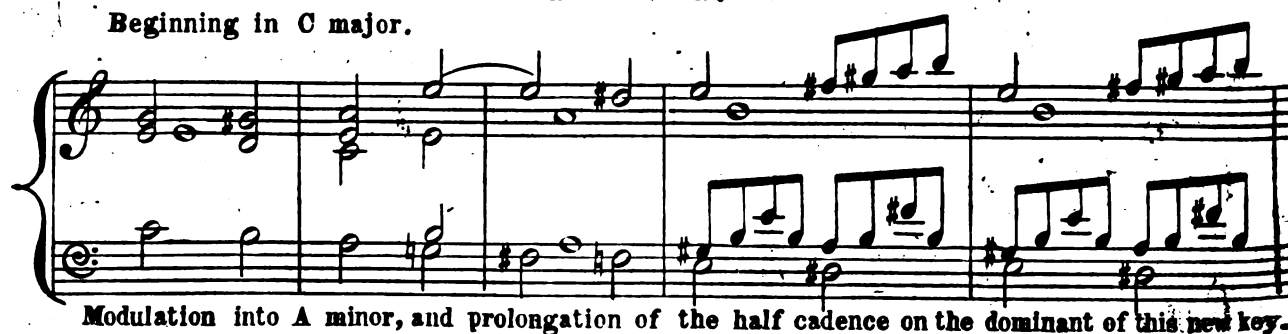
The half cadence may be prolonged:



The prolongation of the half cadence is particularly used for establishing a new tonic.

EXAMPLE.

Beginning in C major.



ANOTHER EXAMPLE.

Modulation into D minor and prolongation of the half cadence on the dominant of this new key:

Beginning in C major.

Pedal.

Organ-point on the dominant of D.

Beginning of a new phrase in D minor.

ANOTHER EXAMPLE.

Modulation into G and prolongation of the half cadence on the dominant of this new key.

Beginning in C major.

Beginning of a new phrase in G major.

This last example is the most used for determining a new tonic indubitably in great pieces of music divided into two parts, such as overtures, symphonies, quartets, sonatas, &c.

As harmony is not over rich in forms of perfect cadences, and as the three following forms: —

are extremely common, we think that we shall do a service to learners by shewing them other ways of terminating periods. These three forms are trite only because the chord of the fourth and sixth is constantly employed in them. By avoiding this chord in final cadences (which is very easy,) more interesting ones will be obtained. Here are some from which the chord of $\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$ is omitted.

OF THE CONNECTION OF CHORDS IN THE SAME KEY OR SCALE.⁽⁸⁶⁾

In every major scale there are found seven triads, namely, three major triads, three minor triads, and one diminished triad, for example:

In G major.

1 st triad.	2 nd	3 rd	4 th	5 th	6 th	7 th
Major.	Minor.	Minor.	Major.	Major.	Minor.	Diminished.

The most used of these seven triads are the 1st on the tonic; the 5th on the dominant; the 4th on the subdominant; afterward come the 2nd and the 6th. The

(85) This formula is remarkable for the use of the suspension marked with a cross, +. See the remark in the chapter of Suspensions, page 115. — R.

(86) As the chords will now be frequently indicated by figures only, the learner has to observe in the first place that where no mark stands over [or under] the base-note, or where a 3, 5, 8, 3, or $\frac{5}{3}$, occurs, a triad (major, minor, or diminished, as required by the key and degree of the scale) is to be taken. The other chords also are for the most part indicated by one or two figures only, and named accordingly. Now in order that the learner may accustom himself to read figured bases rapidly, he must well imprint in his memory what intervals must be added to every figure in playing in order to make every chord complete. To 2 therefore $\frac{4}{2}$ belong; to 4 belong $\frac{5}{4}$; to 6 belong $\frac{5}{6}$; to 7, the $\frac{5}{7}$; to 9, the $\frac{5}{9}$; to $\frac{4}{3}$, the 6; to $\frac{5}{3}$, the 3. Sharps, flats, and naturals have the same meaning as with notes, yet they affect the figures when set after as well as when set before them. These remarks may suffice for the better examination of the present chapter, which, in the section immediately following, treats very fully on the figuring of chords. — C.

third on the *mediant* is very rare; and the seventh on the *leading-note* is scarcely ever employed, unless it be in a progression or regular succession of chords, or else in modulating transiently into A minor, as we have remarked in the analysis of this chord. On the same major scale are found eight discords.

EXAMPLE.

Seventh of the 4th kind. Of the 2^d kind. Of the 2^d kind. Of the 4th kind. Dominant seventh. Major ninth. 7th of the 2^d kind. Of the 3^d kind.

Of these eight chords, the dominant seventh only is frequently employed, sometimes the seventh on the second degree of the scale, and the major ninth, but much more rarely. The other chords of the seventh take place only in a regular succession by falling fifths. Thus the number of chords which may be used continually in a major key is eight.

EXAMPLE.

As some must be employed more frequently than others, we shall present them in the order underneath which indicates that the first is employed more frequently than the second, the second more so than the third, and so on:

These eight chords being also used in their different inversions thus greatly contribute to vary the harmony of *one and the same scale*.

By means of these inversions, the base may receive several of these eight chords on the same note or on the same degree of the scale.

EXAMPLE.

Seldom. Proceeding from the major ninth.

Seldom. Proceeding from the major ninth.

Seldom. Seldom. Proceeding from the major ninth.

As the base can receive several chords on the same degree of the scale one cannot indicate positively before-hand what chord should be given to it in preference, on this or that other degree: this depends on the chord which precedes and very frequently also on that which follows. But it is certain that the chord is badly chosen on any degree whatever—

1st, When it contains a perfect fourth not prepared, between the base and an upper part;

2^{ndly}, When that perfect fourth has not a proper resolution on the chord following;

3^{dly}, When the seventh on the second degree, in whatever inversion it may occur, is not prepared;

4^{thly}, When a discord cannot have a suitable resolution.

In general, the needless employment of the second inversion of the chords must be avoided, because that inversion renders the base weak or faulty. Taking the dominant seventh in its third inversion in the following cases, which experience rejects, must likewise be avoided.

(1) $\begin{smallmatrix} 6 \\ 4 \\ 2 \end{smallmatrix}$ (2) $\begin{smallmatrix} 6 \\ 4 \\ 2 \end{smallmatrix}$ (3) $\begin{smallmatrix} 6 \\ 4 \\ 2 \end{smallmatrix}$ (4) $\begin{smallmatrix} 6 \\ 4 \\ 3 \end{smallmatrix}$ $\begin{smallmatrix} 6 \\ 4 \\ 2 \end{smallmatrix}$

Bad. Bad. Less bad. Good, as two inversions of the same chord.

Thus the base must not take the third inversion of the dominant seventh in quitting the sixth or the second degree of the scale (excepting as in N^o 4); but it may do so in quitting any other degree, for example:

(1) $\begin{smallmatrix} 5 \\ 2 \end{smallmatrix}$ (2) $\begin{smallmatrix} 6 \\ 2 \end{smallmatrix}$ (3) $\begin{smallmatrix} 5 \\ 2 \end{smallmatrix}$ (4) $\begin{smallmatrix} 6 \\ 2 \end{smallmatrix}$

Good.

It must not however be forgotten that the first chord of the example (N^o 1.) should be without inversion; for, if it were sixth or fourth-and-sixth, the example would be bad, and it is likewise rejected by experience.

$\begin{smallmatrix} 6 \\ 2 \end{smallmatrix}$ $\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$ $\begin{smallmatrix} 2 \end{smallmatrix}$

Bad. Very bad.

Further, without quitting the key, the four following chords may be used:

1. 2. 3. 4.

In C major.

counterpoint, fugue, the fugue-style, and for finding a correct and distinguished harmony under melodies difficult to accompany.

In C major.

On the first degree of the scale, On the second degree, (89) On the 3^d deg.

On the fourth degree, On the fifth degree.

On the sixth degree, On the seventh degree.

One and the same note being common to different chords, it is only requisite to seek every one of those chords into which it enters as an integral note in order to find out the number of chords which it is possible to take on every degree.

The following is an air accompanied by chords and all their inversions taken in the same scale only, giving the 52 modifications contained in the preceding table.

All? Moderato.

Soprano
or Hautboy.

Piano
Forte.

(89) This is an inversion of the chord of the major ninth, without the root, of which the A should be indicated by the number 12, because it can have place but in the upper part. — R.

(90) This again is an inversion of the major ninth, of which the note A is indicated by 10 for the same reason. — R.

(91) This chord plays a double part in the major scale: it is a seventh of the third species (B, D, F, A.) and a major ninth, proceeding from G, B, D, F, A. See the analysis of the latter chord, in the first part of this work, page 45. — R.











This image displays a handwritten musical score, likely for a piano and voice. The score is organized into four systems, each consisting of a vocal line (treble clef) and a piano accompaniment (grand staff). The notation is in a historical style, featuring various musical symbols, clefs, and dynamic markings.

- System 1:** The vocal line begins with a treble clef and a key signature of one sharp (F#). The piano accompaniment starts with a piano (*p*) dynamic. The music features a mix of eighth and sixteenth notes, with some rests.
- System 2:** The vocal line continues with a melodic line. The piano accompaniment includes a forte (*f*) dynamic marking. The texture is more complex, with many sixteenth-note passages in both hands.
- System 3:** The vocal line has a melodic phrase. The piano accompaniment features a series of chords and moving lines. There is a dynamic marking of *f* in the piano part.
- System 4:** The final system shows the vocal line concluding with a long note. The piano accompaniment ends with a series of chords and a final cadence. A dynamic marking of *f* is present in the piano part.

The manuscript is written on aged paper, and the ink is dark. The overall style suggests a 19th-century composition.

There exists a formula of accompaniment, when the scale is in the base, known under the name of the *Rule of the Octave*.

EXAMPLE.

Ascending Scale, major mode.

Descending Scale, major mode.

Ascending Scale, minor mode.

Descending Scale, minor mode.

This formula is of so little use in practical composition that it is not worth the trouble of discussing in this work. It would be indispensable only if the base were constrained to proceed continually by ascending or descending scales, and if there were no means of taking several different chords on the same degree. (92)

(92) As this octave-progression sometimes occurs unfigured, it will do the scholar no harm if he will frequently play it; through all the keys, as here given in C major and A minor.—C.

In C major.

1st Position.

2nd Position.

3rd Position.

In A minor.

1st Position.

2nd Position.

3rd Position.

ON CLEARNESS IN THE HARMONY.

It is not enough to be pure, correct and rich in harmony; it is also necessary to be clear, (intelligible.) It is therefore important to know what must be avoided in order not to sin against clearness. The harmony seems confused, as soon as the ear cannot comprehend it with facility. If it proceeded continuously by plain chords only, in semibreves or minims, it is obvious that this fault would be rarely fallen into, because the ear would have sufficient time to seize easily the sounds presented to it. Now, what renders harmony obscure is:

1st A too great rapidity in the succession of notes, chords, and keys.

2nd The complication of various movements made simultaneously in the different parts, especially when they are accompanied by a series of chords following one another with great quickness or with sudden modulations. ⁽⁹³⁾

Two different movements at once are easily united; three at once are combined with a little more difficulty; four at once will injure the clearness if not skilfully combined together, and especially if it be not observed at the same time to make the chords succeed one another at the distance of a measure at the least. But with more than four different movements at once; confusion is almost inevitable.

It is therefore lost trouble to endeavour to give as it were a different movement to every part of the orchestra. This way of treating such a mass of instruments is of no value, even for representing a chaos.

We must not run from one extreme into the other, and in order to become intelligible, introduce poverty. The difficulty is to be at once rich and clear.

Harmony in three parts, and particularly that in two parts, is much less liable to become confused than harmony in more than three parts, and, for this reason, should be more frequently used, especially in compositions intended for the public.

In short, we recommend to pupils, in order to be clear, not to complicate the simultaneous movements of the parts; not to stifle the modulations by passing too lightly over the intermediate chords; to distrust a too rapid succession of chords; to avoid giving a complicated or assuming accompaniment to a predominant melody; and lastly, not to change the key every moment.

Besides clearness in the harmony, there is another clearness which is not less important: it depends on the choice of ideas and the order with which they are connected. Wherever there is neither *unity of ideas*, nor *proportion*, nor *symmetry*, there is confusion. But, as we have developed this matter sufficiently in our Treatise on Melody, it would be superfluous to occupy ourselves with it here. We shall conclude these observations by the following remark:—

A composer is liable to go astray, when he would paint musically certain physical or moral movements. If he does not respect the laws, the precepts and the proprieties of his art, his productions will offer but a confused mass of sounds, which will offend the ear without painting anything to the imagination or to the understanding.

(93) Here is further to be reckoned, the mingling (or passing through each other) of the parts, where, from being kept too close together, they cannot proceed freely; and also the overfilling of the harmony by unavailing doublings, when striving too much after a fullness of parts, or without consideration of the instruments for which the music is written, is observable. — C.

Musicians should imitate the great poets, whose verses are always pure and intelligible, whatever be the image which they would produce.

Thus have Sophocles, Euripides, Virgil, Tasso, Racine, Molière, and so many others, brought the most unruly passions into play, and drawn the most extraordinary situations, without ever violating the laws of poetic harmony; and, from Homer down to our own days, this has been the only method of passing to posterity.

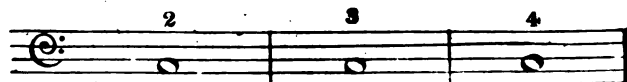
Imitate, if you can, the barbarous accents of savages, the roaring of wild beasts, the clash of the raging elements, and the torments of hell; but respect your art, or else the raging tempest, the yells of savages, and the howlings of wild beasts will be still preferable to your pictures, because they do not deviate from nature.

OF THE MANNER OF INDICATING HARMONY BY FIGURES PLACED ABOVE THE BASE.

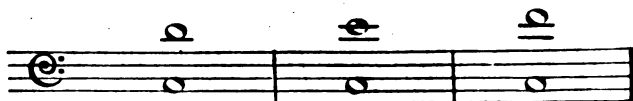
In the seventeenth century, *Ludovico Viadana* invented the figuring of the base, in order to indicate the harmony. His method was generally adopted. It is only about eighteen years since that in France various alterations were introduced, which have not been admitted in any other country. The original method being the most general and the only one by means of which the figured bases of all the great masters can be accompanied, we think that it is necessary to keep to it.

The eight following figures are used: 2, 3, 4, 5, 6, 7, 8, 9, sometimes also 1, 10, 11, 12, but only in particular cases. These figures denote so many intervals: 2 denotes a second, 3 a third, 4 a fourth, and so on.

The base carrying the figures.



should give the following intervals,
at any distance from the base:





But one figure supposes another and often two others, consequently the 3 denotes a complete triad; it supposes therefore the interval of the 5th, hence 3 and 5 denote equally a complete triad.

To alter the intervals, a #, b, or ♭ is placed by the side of the figure, before or after it, in the following way: 5#, 4b, 6♭, or #5, b4, ♭6. Each of these three accidentals fills its common office, raising or lowering the note represented by the figure near which the accidental is placed. Frequently, instead of putting a # by the side of figures, the same alteration is denoted more briefly by a little stroke in the following way: 4+, 5-, 6-, which is equivalent to 4#, 5#, 6#: this is practised with these three figures only. The alterations of the third might be denoted by 3#, 3b, 3♭; but it is agreed, for this interval only, to omit the 3, and put merely #, b, ♭, immediately above the base-note.

The five marked thus $\hat{5}$ signifies false fifth or diminished fifth; and, when placed alone above the base, it denotes the diminished triad.

The small lines placed after figures, and prolonged more or less over several base-notes, signify that the same chord must accompany all the base-notes over which these lines extend.

The following example:  should be played 

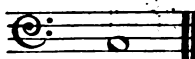
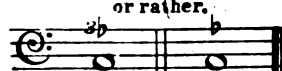
The expression *Tasto solo* signifies that a phrase (which besides is not figured) is to be accompanied without chords, namely, by the base-notes alone.

I. THE METHOD OF FIGURING THE PERFECT TRIADS.

The perfect triads without inversion are indicated in different ways.

EXAMPLE.



There are scarcely any precepts to be given as to these different manners. The choice is almost always determined by what precedes and follows; for it is evident that if, after a major triad of C,  without a figure, one wished to take the minor triad of C, it would be necessary to put  because the alteration from major to minor is made in the third, and, in this case as in many others, the choice is prescribed.

The first inversion of perfect triads is figured by a 6, or $\frac{6}{3}$, according to the case. The second inversion of perfect triads is always figured $\frac{6}{4}$.

II. OF THE DIMINISHED TRIAD.

We have said that the diminished triad is denoted by a $\hat{5}$, or \times . Its first inversion is figured 6, or $\frac{6}{3}$, and its second inversion is figured $\frac{6}{4}$, following the example of the perfect triads.

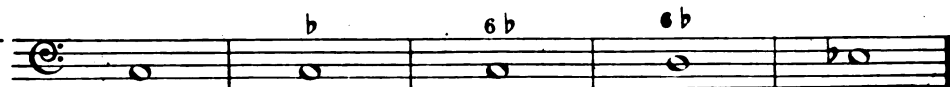
OBSERVATION.

It is clear that \sharp , b , or \flat must be placed by the side of all these figures wherever these accidentals are necessary, otherwise the accompanist would be frequently led into error. These alterations require more figures than would be necessary, if

one always continued in the same scale.

The following examples will explain what we have just mentioned.

EXAMPLE, N^o 1.



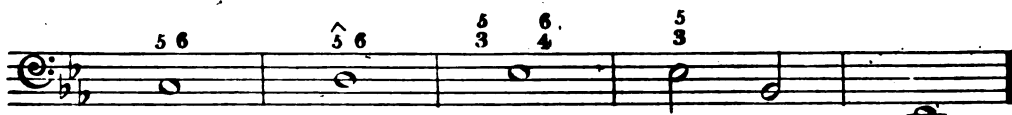
ANALYSIS. This example modulates from C into E flat. The second chord is minor, consequently its third is lowered a semitone. The third chord is (C, E \flat , A \flat ,) in which two notes are each lowered a semitone; but it is sufficient to indicate the sixth by 6 \flat , with which E \flat is understood. The fourth chord is (D, F, B \flat) requiring a \flat added to the figure 6. The fifth chord is sufficiently indicated by the base-note, which supposes a perfect fifth (B \flat) and therefore it is useless to mark it; for augmenting the number of signs must be avoided as much as possible.

EXAMPLE, N^o 2.



ANALYSIS. In this example, it must be shewn by a # that the fifth and ninth chords are major, and by a 6 or 6# that the eighth chord is E, G, C#, and not E, G, C \flat . The alteration of the third in the sixth chord may be dispensed with, because the A# figured with a 6 always supposes C# and never C \flat , since the diminished third is not found in the chords.

EXAMPLE, N^o 3.



ANALYSIS. In this example, there are two different chords on the first, second, and third notes: that must necessarily be shewn by the figures placed after, each other; for, if the 6 were not preceded by the 5 in the first measure, the accompanist would play the chord only indicated by the 6, (C, E \flat , A \flat .) For the same reason, $\frac{5}{3}$ must be put over E \flat in the fourth measure, because there are $\frac{6}{4}$ over the same note in the preceding measure; and without doing so the accompanist would play as follows:



In general, in figuring a base, everything that the accompanist cannot guess must be marked, and the figures and other signs be spared whenever they are not abso-

lutely necessary. (94)

III. OF THE CHORD OF THE AUGMENTED FIFTH.

As the fifth in this chord is always a note altered by an accidental, and taken out of the scale then in use, it must be denoted by a $s\sharp$ or $s\flat$, or by $s\sharp$, according to the predominant key.

EXAMPLE.



The inversions of this chord are denoted in the following manner:



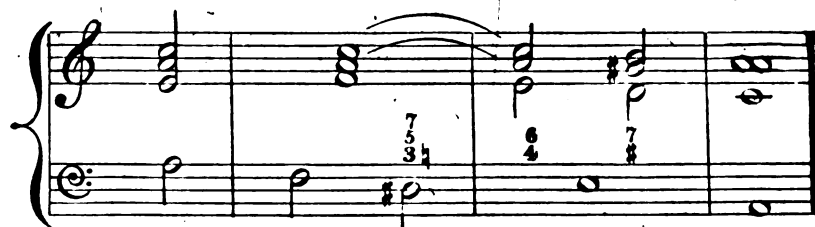
The natural by the side of the 6, in example (A), and that by the side of the 4, in example (B,) are placed there by way of precaution, in order that the accompanist may be certain that these are the inversions of the chord of the augmented fifth, and not those derived from the minor triad of C sharp. We advise the use of this precaution, whenever one chord might be confounded with another, which might happen especially when uncommon chords are employed.

IV. THE WAY OF FIGURING THE CHORDS OF THE SEVENTH.

- 1st The chords of the seventh, not inverted, are figured by 7, or $\frac{7}{3}$, or $\frac{7}{5}$, or $\frac{7}{3}$.
- 2^d In their first inversion, they are figured by $\frac{6}{5}$, or $\frac{6}{3}$.
- 3^d In their second inversion, they are figured by $\frac{4}{3}$, or $\frac{6}{4}$.
- 4th In their third inversion, they are figured by 2, or $\frac{4}{2}$, or $\frac{6}{2}$.

It is well understood that the \sharp , \flat , or \natural should be added to those figures, wherever these accidentals are necessary.

(94) The diminished third has for its accompaniment, the diminished fifth and diminished seventh:



It may be useful, as a supplement to page 77 of the first part, to remark further here, that the diminished third, yet without enharmonic change, is now more frequently employed in cadences in the minor, and in its original chord (which is only an inversion of the augmented or extreme sharp sixth) is not excluded from harmony. - C.

Here is an example in which we have shewn to what species every seventh belongs:

The example consists of five staves of musical notation, each containing a series of chords. Above each staff are figures (7, 4# 2, 6, 6b, 6 4, 6 5, 2) indicating the intervals of the chords. Below each staff are labels identifying the species of each chord:

- Staff 1: 1st species., 1st species., 2^d species. 1st species.
- Staff 2: 1st species., 3^d species. 1st species., 1st species., 1st species., 1st species.
- Staff 3: 4th species. 3^d species. 1st species., 1st species., 4th species. 3^d species.
- Staff 4: 1st species., 2^d species. 1st species., 1st species., 4th species. 3^d species. 2^d species.
- Staff 5: 2^d species. 2^d species. 1st species., 2^d species. 2^d species. 1st species.

When the chord of the dominant seventh is found in its second inversion without its root, that inversion is denoted simply by a 6, or 6 \flat , or 6 \sharp , according to the key.

EXAMPLE. (95)

7th of the 1st species.

According to the system of *Viadana*, the four species of sevenths are denoted in the same manner. What must guide the accompanist and prevent his confounding them are the accidentals at the clef and those which are placed by the figures in case of need. Thus the following four chords of the seventh are denoted alike:

In F. 1st species. 2^d species. 3^d species. 4th species.

because, 1st, on the fifth degree of a major scale, the seventh is naturally of the first species, or dominant; 2^{ndly}, on the sixth degree, it is of the second species; 3^{dly}, on the seventh degree, it is of the third species; and 4^{thly}, on the tonic, or first degree, it is of the fourth species. If it were desired to have the seventh of the first species on the sixth degree of the scale, it would be necessary to figure 7 \sharp to shew that the F is sharp; and, if to have

(95) In order not to confound the second chord with the first inversion of the diminished triad, see the analysis of the latter, page 35 of the first part. — R.

the seventh of the third species on the same degree, it would be requisite to figure $b\frac{7}{5}$ or $\frac{7}{5}b$, in order to shew that the fifth is diminished, seeing that $A\flat$ is not at the clef.

V. THE WAY OF FIGURING THE CHORD OF THE MAJOR NINTH.

As this chord is employed most frequently without its root, and in this case appears to the eye to be a chord of the seventh of the third species, it must in its inversions be so indicated that the accompanist cannot confound them, and that he may always place the ninth in the upper part.

EXAMPLES.

1st Inversion without the root. 2^d Inversion without the root. 3^d Inversion without the root.

If there were accidentals at the clef, this chord should be denoted thus:

1st Inversion without the root. 2^d Inversion without the root. 3^d Inversion without the root.

VI. THE WAY OF FIGURING THE CHORD OF THE MINOR NINTH, AND THE CHORD OF THE DIMINISHED SEVENTH DERIVED FROM IT.

EXAMPLES.

1st Inversion without the root. 2^d Inversion without the root. 3^d Inversion without the root. 3^d Inversion without the root.

If this chord is taken in other keys, the signs necessary to denote the alterations must be put beside the figures.

EXAMPLES.

or,

VII. THE WAY OF FIGURING THE CHORD OF THE AUGMENTED SIXTH.

EXAMPLES:

The examples show the augmented sixth chord in three keys: C major, A major, and Eb major. Each example consists of a single note on a staff with a figured bass below it. The figures are: In C, $\begin{smallmatrix} 6\sharp \\ 5b \end{smallmatrix}$; In A, $\begin{smallmatrix} 6\sharp \\ 5 \end{smallmatrix}$; In Eb, $\begin{smallmatrix} 6\sharp \\ 5b \end{smallmatrix}$. The word "or" is placed between the examples.

VIII. THE WAY OF FIGURING THE CHORD OF THE AUGMENTED FOURTH AND AUGMENTED SIXTH.

EXAMPLES:

The examples show the augmented fourth and augmented sixth chords in three keys: C major, A major, and Eb major. Each example consists of a single note on a staff with a figured bass below it. The figures are: In C, $\begin{smallmatrix} 6\sharp \\ 4 \\ 3 \end{smallmatrix}$; In A, $\begin{smallmatrix} 6\sharp \\ 4 \\ 3 \end{smallmatrix}$; In Eb, $\begin{smallmatrix} 6\sharp \\ 4 \\ 3 \end{smallmatrix}$.

IX. THE WAY OF FIGURING THE CHORD OF THE AUGMENTED FIFTH WITH THE SEVENTH.

EXAMPLES:

The examples show the augmented fifth with the seventh chord in four cases: Without inversion, In the 1st inversion, Without inversion, and In the 1st inversion. The figures are: Without inversion, $\begin{smallmatrix} 7 \\ 12\sharp \\ 7 \end{smallmatrix}$; In the 1st inversion, $\begin{smallmatrix} 6 \\ 5 \\ 10\sharp \end{smallmatrix}$; Without inversion, $\begin{smallmatrix} 7b \\ 12\sharp \end{smallmatrix}$; In the 1st inversion, $\begin{smallmatrix} 10\sharp \\ 6b \\ 5 \end{smallmatrix}$. The word "or" is placed between the second and third examples.

In this chord, the augmented fifth must be denoted by $12\sharp$, and in its inversion by $10\sharp$, in order to warn the accompanist to take this note in the upper part.

X. THE WAY OF FIGURING ACCIDENTAL NOTES.

1st Passing-notes are not figured.

When the base contains passing-notes, the figures are placed over the first essential note, and lines are drawn over all the notes which are intended to be heard under the same chord.

EXAMPLE.

The example shows a musical passage with three staves. The first staff has a sequence of notes with figures 5, 6, 5, 5, 2, #, 6. The second staff has a sequence of notes with figures 5, #, 5, 5, b, 7, #, 6, 5, 5. The third staff has a sequence of notes with figures 6, 5, 5, 7, 5, 6, 5, 5, 7. Lines are drawn over the notes to indicate the intended chord.

The following example, in which the passing-notes are made in thirds, and in notes of long value, or in a slow movement, is figured thus:



The harmony is then but in three parts.

2^d The discords resulting from the use of appoggiaturas and syncopations, when they are in the upper parts, are not indicated. The base is figured simply as if these notes did not exist.

EXAMPLE.



When the syncopations or appoggiaturas occur in the base, the figures are placed over the essential notes of the chords, and the accompanist plays them in the following way:



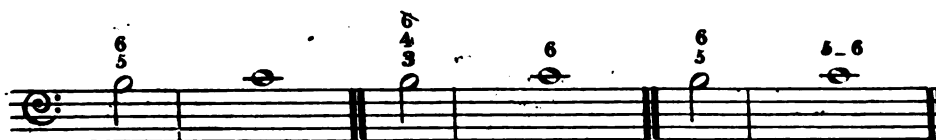
3^d Suspensions with their resolutions *must always be denoted by figures.*

We have already shewn, in the article on suspensions, in what manner they are indicated. It yet remains for us to shew which are the figures required to be added to those representing the suspension and the resolution, in order to determine the kind of chord to which they belong; for the same suspension may have place on different chords, as may be seen by the following examples:



In example N^o 1, the suspension and resolution are made on the chord of C.
 In example N^o 2, they are made on the first inversion of the minor triad of A.
 In example N^o 3, the suspension is made on the major triad of C, and the resolution on the minor triad of A.

On taking away the suspension from these three examples, they would be figured as follows:



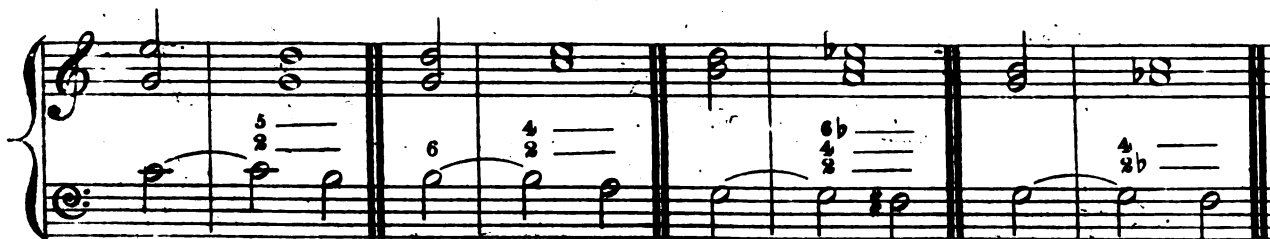
Now, by employing suspension, we have but to add to the above figures, which are indispensable, the figures 9-8, which denote the suspension and its resolution.

Thus then, if one desired to suspend C by D in the following chord, it would be necessary to add the figures which denote the suspension and the resolution. **EXAMPLE,**

EXAMPLE, The following inversion of the same chord would give with suspension

When suspensions are placed in the base, the intervals which the suspension forms with the other notes of the chord are marked.

EXAMPLE.



At the end of cadences, when the chord of the dominant seventh, complete or incomplete, is placed above the tonic or the dominant, it is figured in the following way:



Here is an example of various suspensions with the manner of figuring them:

The musical score consists of six systems, each with a grand staff. The key signature has two flats (B-flat and E-flat), and the time signature is common time (C). The bass line is heavily figured with numbers 1-7, often with accidentals, indicating specific fingerings and voicings for the left hand. The right hand plays chords and moving lines. The systems illustrate various suspension techniques, such as suspending the 4th, 6th, or 7th of a chord.

System 1: Bass line figures include 5, 5 4, 7 6, 7 6, 4 8, 4 8, 7 6. Right hand: 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

System 2: Bass line figures include 7 6, 4 8, 7 6, 6 5, 7 6, 5, 6. Right hand: 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

System 3: Bass line figures include 7 6, 9 6, 7 6, 9 8, 7 6, 7 6, 4 8. Right hand: 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

System 4: Bass line figures include 7 6, 5 5, 7 6, 5 5, 7 6, 5 5, 7 6. Right hand: 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

System 5: Bass line figures include 7 6, 7 6, 7 6, 6, 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7. Right hand: 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

System 6: Bass line figures include 5, 6 5, 9 8, 6 5, 9 8, 6 5, 9 8. Right hand: 5, 4, 3, 2, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.



4th The way of figuring pedal harmonies, or organ-points.⁽⁹⁶⁾

The organ-point is usually denoted by the words *Tasto solo*. According to this indication, the accompanist can strike only the base-note, without any harmony: this is a defect which, however, it is easy to remedy; for it is unreasonable that the accompanist should omit the harmony where it becomes the most essential, because it is difficult to indicate it.

(96) D^r Oretob calls the organ-point by its Italian name *pedale* (in three syllables) - *pedalé*, or *cadenza continuata*.— *M.*

Besides the note which makes the organ-point, the part placed immediately above it is considered as a *second base*.

On figuring this second base, all the difficulties of denoting the harmony on an organ-point are removed.

EXAMPLE.

2^d Base.

Pedal, or organ-point.

The accompanist will perform this in the following manner:

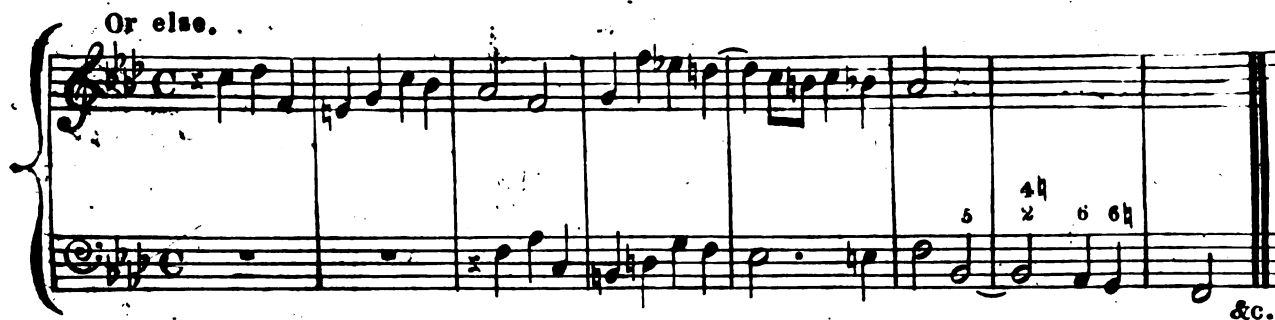
5th Anticipations also are not indicated by figures.

There are occasions, especially in the fugue style, where it is desirable that the accompanist should sound but two parts, and, further, that, these two parts be such as the composer conceived them: they must then be written in the following manner:

Tasto solo.

Or,

9490



This indication occurs principally at the commencement of a fugue, where the two parts should be heard in their purity, and at their proper pitch. As soon as the harmony is in three parts, the base is figured.

The method of figuring the base which we have just explained, and which is that of *Viadana*, has not precisely for object to denote the different kinds of chords. That is not at all necessary in order to accompany a figured base. What is essential is, to indicate exactly the notes composing every chord. What matters it indeed whether the accompanist knows the kind of chords or not, provided he performs them according to the principles which he must know. The figures represent the notes: a chord exactly noted or exactly figured must be performed in the same manner, without its being necessary to enquire into its nature.

CONCLUDING REMARK ON THE SECOND PART, BY CARL CZERNY.


Since it is not unimportant that the composer, even if no organ-player, should be able to play figured bases with facility, it is to be recommended, that he should diligently play through the figured bases of masses, oratorios, &c., and especially accustom himself to take every chord in its right position, expressing also the course of the melody of the composition, so far as it can be intimated by the figures. Not less useful will it be to the learner, if he will write the figuring to the bases of different compositions, (particularly those of a grave description, scores, &c.,) and likewise not omit doing the same by all his own productions. — C.

End of the Second Part.

THIRD PART.

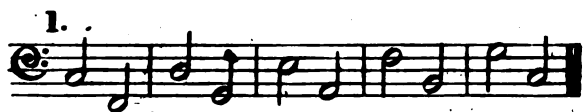

OF THE FORMATION OF HARMONIC PROGRESSIONS.⁽⁹⁷⁾

An harmonic progression is formed by reproducing harmonically and regularly, whether rising or falling, a given formula, which we shall call the *pattern*. Let us

take as such the following two notes,  which will give the two progressions:—

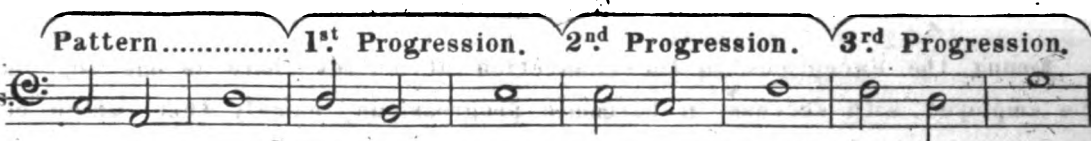
1.  or 2. 

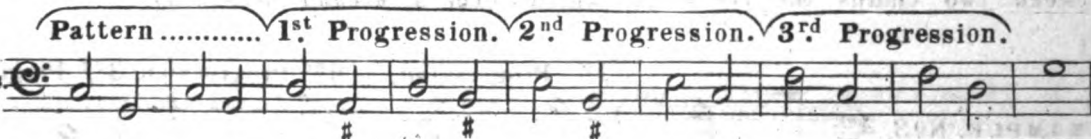
By pursuing the same figure a certain number of times, the two following harmonic successions will be obtained:

1.  or 2. 

The same operation is employed not only with two chords, but also with three or four.

EXAMPLES.

With 3 chords: 

With 4 chords: 

It results from these observations that every phrase composed of a few chords can furnish harmonic successions: the only point in question is to know the principle according to which the first chord of the progression must be connected with the last chord of the pattern.

The most regular connection is that in which the radical base falls a *third*, *fourth*, or *fifth*, between the last chord of the pattern and the first chord of the progression.⁽⁹⁸⁾

(97) Dr. Grotch has arranged the progressions of triads in three classes; six simple diatonic successions, mixed diatonic successions, and chromatic successions. — *Elements of musical Composition*, pp. 16 — 22. 2^d edit. 1833. — *M*.

(98) It is by the radical base alone that harmonic successions are regulated; it is therefore important to consult it; and not confound it with the lowest notes of the harmony in the inverted chords, if we wish to avoid running the risk of forming faulty progressions. — *R*.

EXAMPLES.

No 1.

Connection
by falling
thirds.

Pattern 1st Progression. 2nd Progression. 3rd Progression.

Rising a 6th
or falling a 3rd Ditto. Ditto.

The choice of the chords: major or minor, and the point where the succession must end are objects of the feeling and the ear.

No 2.

Connection
by falling
fourths.

1st Progression. 2nd Progression.

Rising a 5th
or falling a 4th Ditto. Ditto.

The progression by falling a fifth or rising a fourth cannot take place with this pattern, because it would recommence continually.

EXAMPLE.

Rising a 4th
or falling a 5th Ditto. Ditto.

Among the exceptions in the connection of chords there is one that may often be employed with success in harmonic progressions, namely that which occurs between two chords the roots of which form a *second ascending*.

EXAMPLE. No 3. 1st Progression. 2nd Progression. 3rd Progression.

Rising a 2nd Ditto. Ditto.

(99) As we cannot proceed from exception to exception, care must be taken to proceed regularly by falling a third, fourth, or fifth, between the last chord of the pattern and the first of the progression, whenever the radical base of the last two chords of the pattern shall itself move a second. — R.

EXAMPLE.

Falling a 3rd Ditto. Ditto. Ditto. Falling a 4th Ditto. Ditto. Falling a 5th Ditto. Ditto.

An harmonic succession frequently admits of one or more modifications by inversions of the chords:


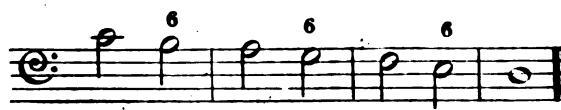
EXAMPLES;

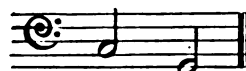
Inversions of the progression N^o 1.

N^o 1. 

The second chord of the pattern always in its 1st inversion.

Inversions of the progressions N^{os} 2 and 3.

N^o 2.  N^o 3. 

By adding these last three examples to the three others, we have six successions or harmonical progressions, which take their origin from the two chords 

QUALITIES OF THE PATTERN.

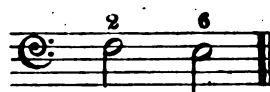
The pattern must end with a concord, should not be long, and may contain as many as 5, 6, 7, or 8 chords, according to the [degree of] movement. It may begin by a discord.

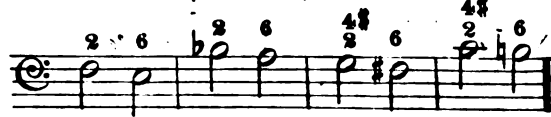
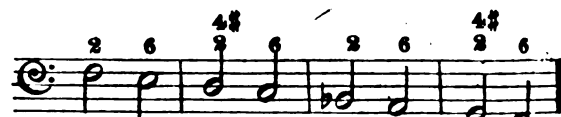
The discords which may be found in it must have an exact resolution, and as much as possible without exceptions; yet this last rule is not always strictly observed.

The discords by which a pattern may commence are, first, the dominant seventh; second, the diminished seventh, (less frequently); third, the chord of the augmented sixth, (very rarely): all the other discords can be used in the course of the pattern only.

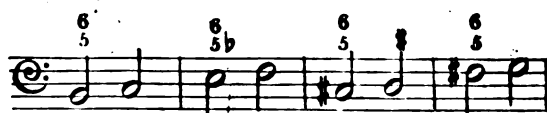
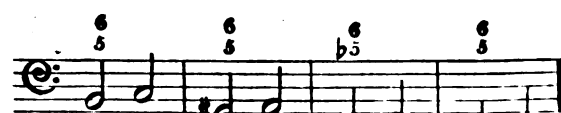
HERE ARE EXAMPLES.

1st Pattern, beginning with the dominant seventh in its third inversion:

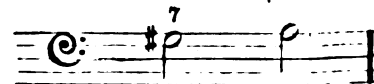
 which gives the following harmonic successions:

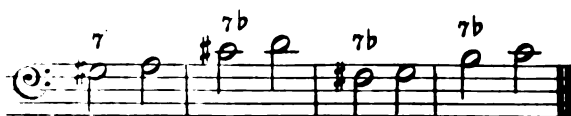
 or 

By putting the chord of the seventh in its first inversion we shall have:

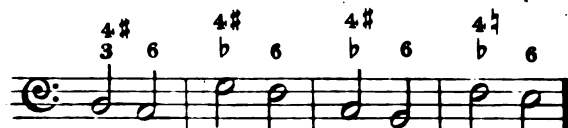
 or 

2^d Pattern, commencing with the diminished seventh:






Progression.




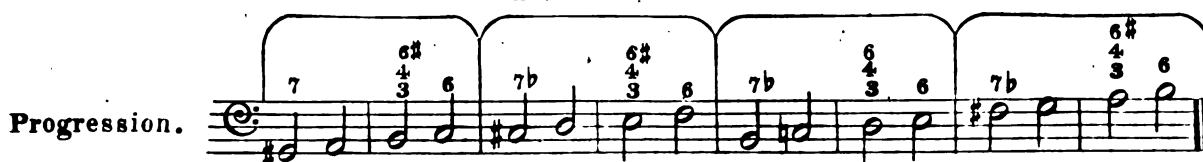
The same example inverted..

3^d Pattern, beginning with the chord of the augmented sixth: 



Progression.

4th Pattern, of four chords, two of which are discords: 



Progression.

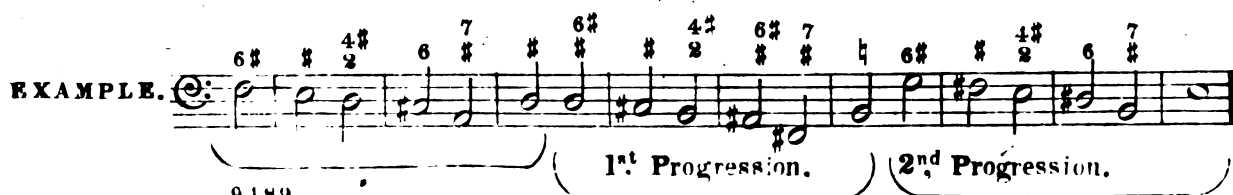
In this example, the pattern is transposed from A minor into D minor, namely, a fifth lower. The regularity of the progression would seem to require consequently that it should be transposed afterward from D minor into G, from G into C, &c., which has not been done here, for the modulation from D minor is into C, (a second below,) and from C into G (a fourth below.) Modulations of these kinds are thus used in the formation of harmonic successions, whenever the enchainment of chords and keys is made with freedom.

Another progression of the same kind:



A pattern in a minor key may often be found major in the progression, and *vice versa*, as shewn in the preceding example.

5th Pattern, of six chords: 



EXAMPLE.

1st Progression.2nd Progression.

6th Pattern of eight chords:



OF THE UNION OF HARMONIC AND MELODIC PROGRESSIONS.

EXAMPLES :



There are melodic progressions which offer a great many difficulties, when it is desired to accompany them regularly by harmonic progressions, whilst others may become the source of new and striking harmonical progressions, which might have been sought after in vain without their assistance.

It is more difficult to invert harmonic progressions to a given melody, in all cases, than to produce them without reference to any melody.

The following is a melody containing two different patterns:



each of which admits of an harmonic succession or progression.

The first part of this melody may be accompanied in the five ways following:



Here there are five different ways of accompanying a melodic progression, the first four of which are real harmonical progressions.

The second melodic progression, of which the first three notes are the pattern, does not offer the same richness. Here are two successions of harmony, which may serve to accompany it:



(100) As isolated melodious phrases only are here considered, and not the beginning or termination of a piece of music, it is indifferent to commence or end the progression with this or that chord, inverted or not inverted. — R.

When a melodic progression is given, it is necessary first to examine whether it will admit of several accompaniments, in order to choose the most suitable.

In pieces of music wherein the melodic progression can or should be frequently repeated (as in the fugued style,) it is important to know and to employ this method of enriching an accompaniment, it being there quite in its proper place.

It is also by consulting the radical base that we shall succeed in accompanying melodic successions.

Whenever the radical base can proceed without exceptions, namely, by falling a third, fourth, or fifth, this method should be preferred, especially when discords cannot be employed without injuring the melody, or when it is wished to avoid them in order to obtain a softer accompaniment; for example:

ANALYSIS.

(Nº 1.) The radical base proceeds by falling thirds and fifths. The harmony and melody remain in the same key: in this case, the harmonical progression may sometimes take place upon an organ-point; as in the following example. (See Nº 2.)



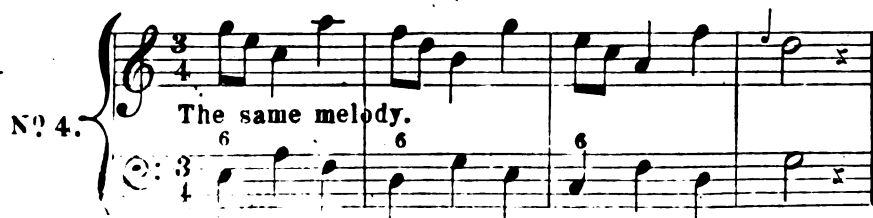
(Nº 2.) Harmonic progression upon the organ-point.



(Nº 3.) The radical base proceeds also by falling thirds and fifths:



(Nº 4.) The roots (or fundamental notes) fall a third twice following, and a fifth once, under the same melody.



(Nº 5.) The radical base proceeds by falling a third and fourth.

Nº 5.



(N^o 6.) The radical base makes two exceptions, (F, E, and A, G,) which may take place when the melodic progressions are difficult to accompany.

No. 6.



(Nº 7.) In this example, the notes marked thus + must be considered as appoggiaturas. (101)

giaturas. (101)

Nº 7

(Nº 8.) In this example, the same notes marked + are considered as essential notes and are consequently accompanied by other chords. The radical base of these two examples makes again exceptions chosen on account of the nature of the passage of melody.

No. 8.

The musical score consists of two staves. The top staff uses a treble clef and a key signature of one sharp (F#). It contains three measures of music, each beginning with a '+' symbol above the first note. The bottom staff uses a bass clef and a key signature of one sharp (F#). It contains three measures of music, each beginning with a '6' below the first note. Both staves conclude with a double bar line.

(N^o 9.) The radical base proceeds by falling fifths, and the harmonical progression ends at the sixth chord.

No 9

3/4

6

6

6

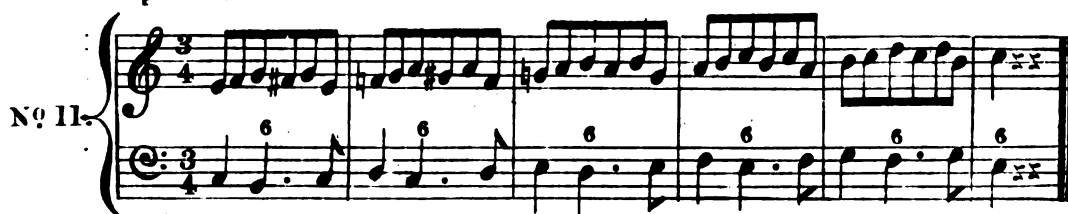
6

(101) It is very important in these progressions to know how to divide the notes of the melody into essential and accidental notes. There are cases in which the same notes may be considered sometimes as essential and sometimes as accidental (namely as passing-notes or appoggiaturas,) giving occasion in such cases to two different accompaniments. . . . *R.*

(Nº 10.) The first note of the pattern-melody of the preceding example may be considered as an appoggiatura, and hence the harmony may be modified in the following way:



(Nº 11.) The melodic progression of this example is one of those which admits with difficulty of a regular harmonical succession. Here also the radical base makes exceptions.



(Nº 12.) A succession of chords, such as that of the preceding example, produces more effect on a pedal-note. This deep and immoveable note envelopes as it were all the chords and connects them more closely, by referring them continually to the tonic.



(Nº 13.) Another method of accompanying the preceding progression, which is frequently preferable to the regular harmonical successions. There are however melodic progressions, which do not admit that simplicity of chords, and which cannot be accompanied without having recourse to harmonical successions.



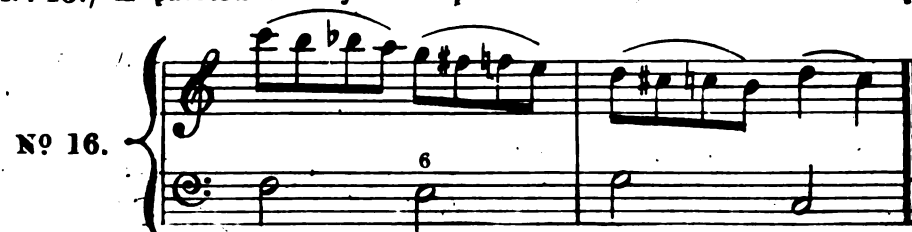
(Nº 14.) In this example, any other harmony is scarcely practicable.



(Nº 15.) In this example, the pattern is composed of the first four notes of the melody.



(Nº 16.) A pattern-melody accompanied without an harmonical progression.



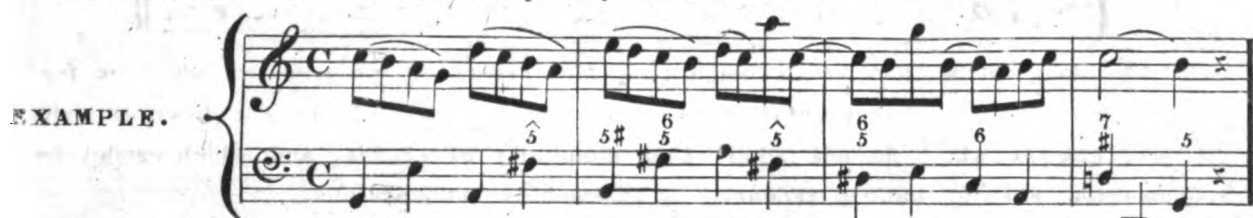
We recommend students to exercise themselves frequently in this matter. ⁽¹⁰²⁾

HERE IS A TABLE OF THIS OPERATION.

(a) Melodic pattern.	(a) Harmonical pattern.
(b) Melodic progression, continuing in the same key, or else modulating.	(b) Harmonical progression, continuing in the same key, or else modulating.

The melody, although continuing in the same key, sometimes bears an accompaniment of which the harmony modulates.

This apparent contrast produces effect and sets off the melody: it is a delicate resource and which consequently should not be abused.



We shall terminate this article with the different harmonic steps or progressions

(102) And indeed, subsequently, also in many parts, for example:



and likewise in all keys and times. Finally, as to such exercises, as well with regard to the pattern-melody as to the harmonical accompaniment, the student must endeavour as frequently as possible to invert them himself, and should write them down not only on two staves (for a keyed instrument) but also on four staves (for the violin-quartett or for voices,) because in this form greater space is allowed for the conduct of the parts. — C.

contained in the following table: ⁽¹⁰³⁾

Nº 1. Major key. **Nº 2.** The same in minor.

Nº 3.

Nº 4.

Nº 5. **Nº 6.**

Nº 7.

The musical exercises are arranged in a table-like format. Each exercise (Nº 1 through Nº 7) is presented on a grand staff (treble and bass clef). Exercise Nº 1 is in Major key, and Exercise Nº 2 is 'The same in minor'. Exercises Nº 3 through Nº 7 show various musical notations, including notes, rests, and fingerings (e.g., 6, 7, 9, 5, 6, 7, 6, 5, 4, 3, 2, 1). Some exercises include specific fingering instructions like '6', '7', '9', '5', '4', '3', '2', '1'.

(103) Which not less than all other examples, are to be practised by the scholar in the remaining keys, as well as transposed in writing. — C. 9489

Nº 8. Nº 9.

Nº 10.

Nº 11.

Nº 12.

Nº 13. Nº 14.

Nº 15.

№ 16.



Nº 17.



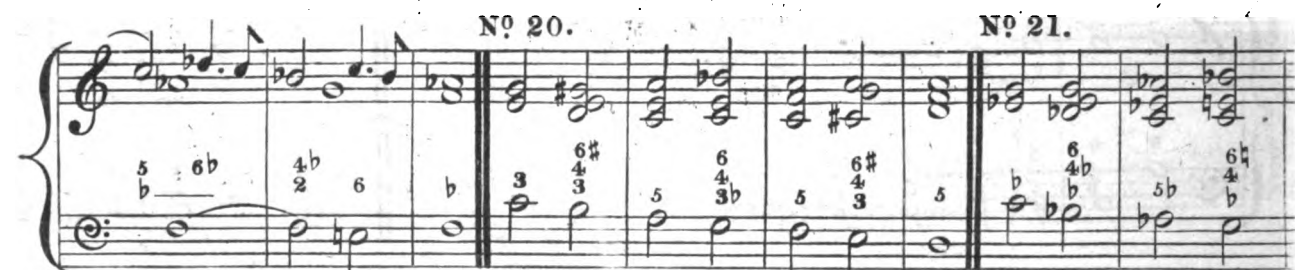
№ 17. № 18.



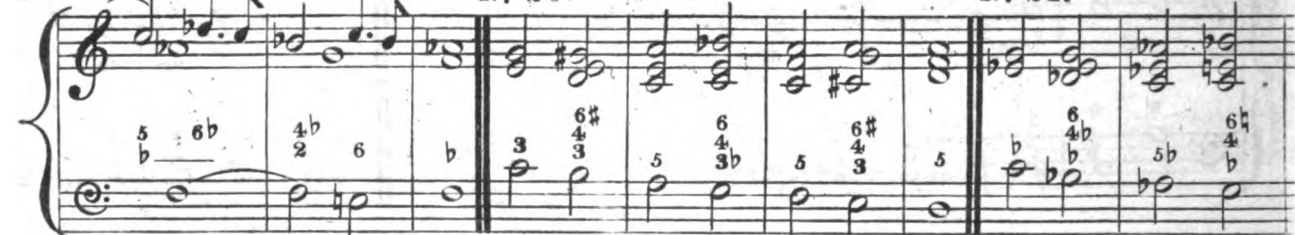
№ 19.



№ 20.



№ 20. № 21.



№ 22.



Nº 23.



Nº 23. **Nº 24.**



Nº 25. Nº 26.

Nº 27.

Nº 28. Nº 29.

Nº 30.

Nº 31. Nº 32.

Nº 33.

Nº 34.

Nº 35. Nº 36.

Nº 37.

The second note of every chord in the base makes an organ-point.

Nº 38.

Nº 39.

Nº 40.



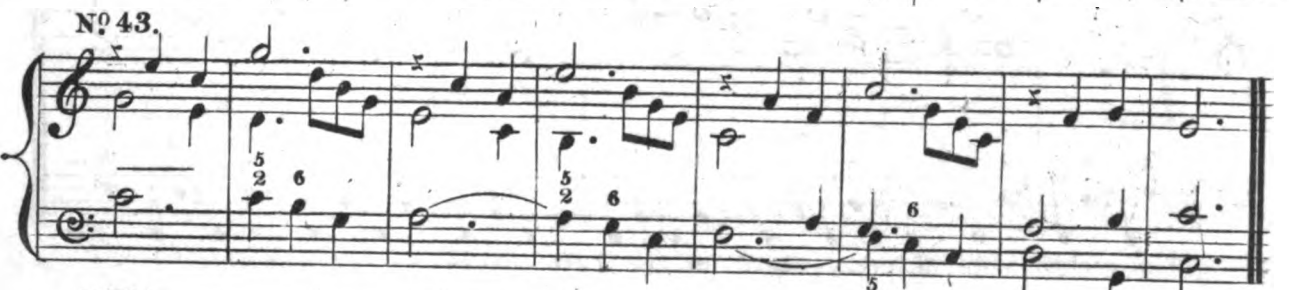
Nº 41.



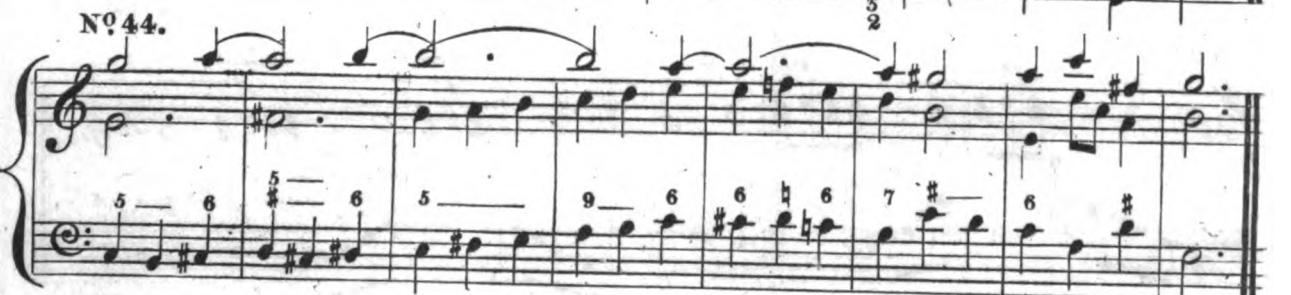
Nº 42.



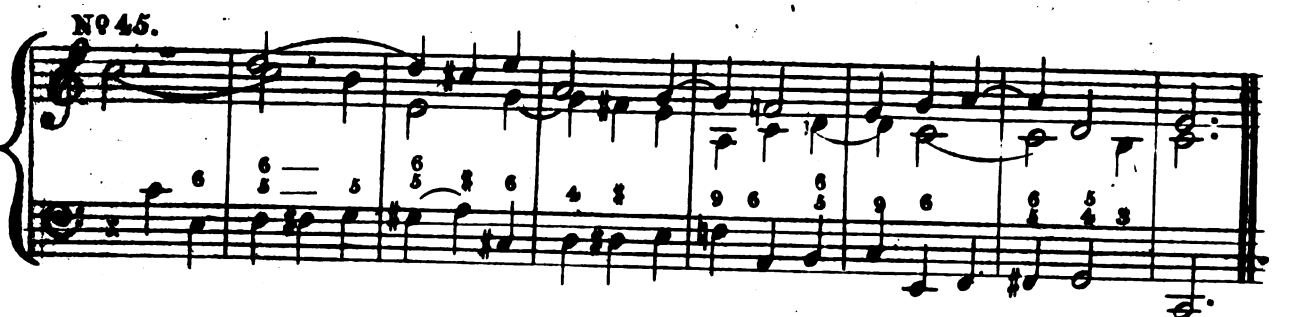
Nº 43.



Nº 44.



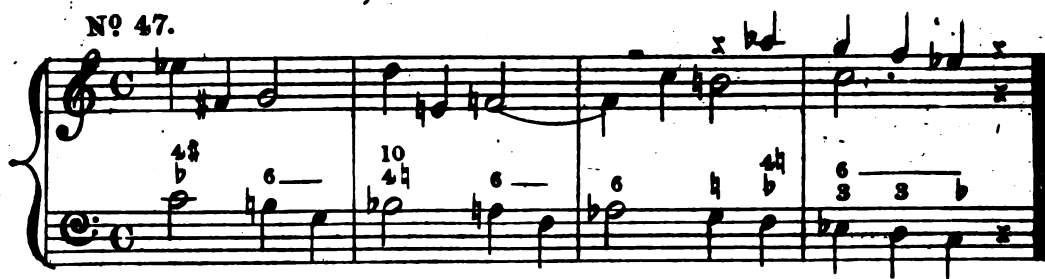
Nº 45.



Nº 46.



Nº 47.



Nº 48.



Nº 49.

Nº 50.



This progression of $\frac{6}{5}$ can take place in this way only, namely, wherever the s occurs it must resolve on the third.

This succession cannot be practised but with this distribution of the parts.

OF THE DIFFERENCE BETWEEN STRICT AND FREE COMPOSITION.

Every piece of music, whether strict or free, should be written with purity, namely, be exempt from faults. The word *free* does not here imply the admission of arbitrary licences.

But there are musical productions wherein the harmony must be treated more rigorously; and these are distinguished by the names *strict music*, *strict counterpoint*, or *strict harmony*. (104)

This strictness consists in avoiding, *first*, the succession of two or more parts in the unison or octave; ⁽¹⁰⁵⁾ *secondly*, the use of broken chords and appoggiaturas; *thirdly*, the predominance of a single part; *fourthly*, common airs or passages; *fifthly*, enharmonic modulations.

On the other hand it is required, in this kind of music, *first*, that every part shall have peculiar designs distinguishing it from the others, namely, that no part shall be merely for filling up; *secondly*, that the successions of chords shall be frequent and novel; *thirdly*, that frequent use shall be made of suspensions; *fourthly*, that we employ imitations, canons, the fugued style, double counterpoint, in short all harmony admitting of inversion. (106)

Productions in the strict style are:

1st The greater part of church-music.

2^d The fugue and canons.

3^d Music of the school or study.

In free music, on the contrary, we may use all that must be carefully avoided in that above-mentioned.

1st Two or more parts are often made to proceed in the unison or octave.

2^d Most frequently a single part predominates and the others only accompany it.

3^d Modulations are made with great freedom, following in a manner the caprice of the author. Frequently also the same key is continued for a long time, which is inadmissible in the strict style.

4th Broken chords are very often employed in it.

5th Appoggiaturas and in general the accidental notes are lavished, excepting suspensions, of which the use is a great deal rarer.

6th The predominant part makes octaves at every step with one or other accompanying part.

7th Successions of thirds or sixths, as well as certain forms of common cadences are here repeated on every occasion.

(104) The words *counter-point* and *harmony* are synonymous; hence the expressions, *simple counterpoint*, *double counterpoint*, *florid-counterpoint*, *strict counterpoint*, are the same as simple harmony, double harmony, florid harmony, strict harmony. — R.

(105) It is well understood that this strictness cannot be extended to the masses of the orchestra, when the harmony must be doubled or tripled. — R.

(106) Double counterpoint, imitations, canons, fugue and the fugued style form the objects discussed in treatises on the fugue. [See the last two volumes of these works.] — R.

8th. Less regularity is observed in the resolution of discords. ⁽¹⁰⁷⁾

Musical productions in free composition are:

1st All those that display instruments and voices; the *concerto*, *solos*, *airs*, the *romance*, the *canzonetti*, *rondos*, &c.

2^d Military music, chamber music, and in general music for the theatre.

There are besides works of a mixed kind: such are *quartetts* in the style of Haydn, *symphonies*, &c. the whole being a mixture of strict and free harmony.

In treatises on composition and in the schools, only the strict style is taught, as it existed in the time when Fux published his *Gradus ad Parnassum*, Angelo Berardi his *Documenti Armonici*, and Gioseffo Zarlino his *Instituzioni Armonici*. ⁽¹⁰⁸⁾

At that time, scarcely any other music than that of the ancient *very strict* style of the Church was known.

Musical composition, like all the arts which tend continually towards their improvement, has since made great progress, the fruit of knowledge acquired by more or less fortunate experiments.

Taste has altered repeatedly and very frequently to the advantage of the art, of which the limits have been extended by introducing successively dramatic, instrumental, and chamber music.

These new species, by forming celebrated virtuosi and singers of both sexes, whose talents must afterward be displayed, deviated gradually from the strict species taught in the courses of composition and in use in church-music, giving birth to the free style, which has prevailed.

It is therefore wrong not to teach its principles to pupils, who, on quitting the guidance of their masters, are disconcerted at not understanding any music, but that which is composed in a style almost diametrically opposite to that which they have studied; whence it follows that a great many learners think everything is allowed in free composition, and, what is still worse, that the profound study of composition is entirely useless.

OF IMITATIONS. ⁽¹⁰⁹⁾

This article is one of those commonly classed in Treatises on Fugue and double Counterpoint. But there is a portion of this subject which belongs to the study of harmony, and for that reason we have thought proper to insert it here.

Imitations are made by repeating a phrase or passage of melody, or by reproducing the same design in other parts.

⁽¹⁰⁷⁾ The conduct of the parts likewise cannot be so well observed, partly on account of the compass of the instruments, and, in compositions for keyed instruments especially, because the extension of the fingers is limited, and the composer has to consider the convenience of the execution. — C.

⁽¹⁰⁸⁾ Fux's work was published in 1725; a translation of the practical part into English, in 1797. The *Documenti Armonici* of Angelo Berardi was published, in Bologna in 1687; and Zarlino's *Instituzioni Armonici* was first published in Venice in 1558. — M.

⁽¹⁰⁹⁾ Imitations of storms, battles, the sounds of hunting, of the sea, of birds, &c. in musical pieces, are not considered here. — M.

It is proposed, for example, to imitate the following passage:

Melody.



At first sight it is clear that, after the fourth bar, any other part may repeat the same passage either in the same key or in a relative key.

N^o 1.
EXAMPLE.

Melody. 2^d Accompaniment.....

1st Accompaniment..... Melody.

If on so repeating a passage of melody, the first accompaniment can no longer be employed,⁽¹¹⁰⁾ a second may be made as in the preceding example. This kind of imitation is the most simple and easy, and may often be employed with success in free composition. When the harmony will allow it, this kind of imitation may be made more closely, making it begin with the fourth measure.

N^o 2.
EXAMPLE.

If it could be made to begin still earlier; it would become more interesting. To discover the possibility of doing so, it is necessary to try the imitation in every strong time of the measure, when the passage to be imitated begins in a strong time, or in every weak time, when it begins in a weak time. This trial is made:—

- at the second above or below.
- at the third.....
- at the fourth.....
- at the fifth.....
- at the sixth.....
- at the seventh.....
- at the octave.....
- at the unison.....

⁽¹¹⁰⁾ This may frequently happen; for here we do not require double counterpoint, which allows inversion of the harmony. — R.

In these imitations, the whole of the melody is not always repeated: it is sufficient to cause a portion of it to be heard.

Three musical examples of imitations in piano. Each example consists of a right-hand melody and a left-hand imitation. Example No. 3 is labeled 'No. 3.' and 'Imitation in the 3^d below.' Example No. 4 is labeled 'No. 4.' and 'Imitation'. Example No. 5 is labeled 'No. 5.' and 'Imitation in the 2^d below.' Example No. 6 is labeled 'No. 6.' and 'Imitation in the 8^{ve} below.' Example No. 7 is labeled 'No. 7.' and 'Imitation in the 2^d below.'

In No 7, the imitation is made with the second measure of the melody only, which is reproduced successively in the other parts and serves at the same time as an accompaniment.

Passages of melody are more or less adapted for these imitations, but there are very few that do not offer the possibility of making at least one or two.

It may frequently happen that the composer may think it unsuitable to make use of this resource; for the question is not merely to make imitations, but he must know where to place them properly.

The productions in which they are admissible are those which are to display the talent of the composer, as concerted pieces, choruses, overtures, and various instrumental works. Imitations are scarcely applicable in pieces requiring great simplicity or an interest purely melodious, as airs, romances, canzonets, cavatinas, rondos, &c. There are however imitations which are but *imitations of movement*, of which a more extensive use may be made. In order to realize this proposition, we take a little

passage of 5, 6, or 8 notes, for example:  in which there are three quavers and two crotchets, and we repeat this passage, (either in the same part,

or by removing it from one part to another) in all possible directions and by retaining always the same value of the notes.



The upper part here imitates the same passage (or figure) eight times following, and forms a complete phrase of melody.



In this example, it is the part B which imitates the given melody and serves at the same time as accompaniment to the part A.

In the following example, the same passage pervades the three lower parts, and serves as accompaniment to the melody in the highest part.



(iii) The learner cannot easily find a more interesting exercise than to set himself the task of inventing such passages, and frequently to write them out, in a variety of ways, as well for the quartet as for keyed-instruments; and also to furnish simple vocal subjects, not his own, with such accompaniment; by which means he will, at the same time, obtain dexterity in a noble species of variation. C.

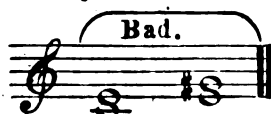
OF HARMONY IN TWO PARTS.

Harmony in two parts requires profound study which learners too much neglect. It has a peculiar charm and interest. It is of the same importance, in practice, as harmony in three and four parts, for it may be used with success in all musical productions of whatever species.


All the usual intervals may be employed in two-part harmony, as will hereafter be seen, and we are not restricted to consonant intervals alone, excepting in the expression of gentle feelings.

It requires, still more than harmony in three and in four parts, extreme purity, because, being isolated from other parts, nothing disguises the faults it may contain.

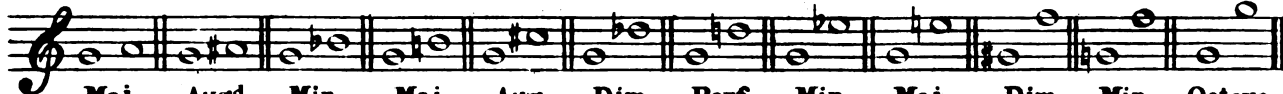
It is in two-part harmony that two major thirds in succession, in similar motion, may sometimes produce a bad effect; such are, for example, the two major thirds

following:  in which a bad relation exists between C and G sharp.

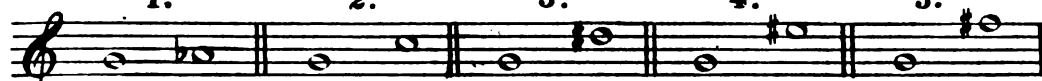
Similar cases being subject to too many exceptions, it would be difficult to prevent them by certain rules, which moreover the ear can readily supply. This observation on the succession of major thirds in similar motion does not extend to harmony in more than two parts, for the preceding example set in four parts, in

the following manner, is good: 

There are intervals which are more especially fit to be employed as essential notes in two-part harmony; such are the following:

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
											
Maj.	Augd.	Min.	Maj.	Aug.	Dim.	Perf.	Min.	Maj.	Dim.	Min.	Octave.
2 nd	2 nd	3 rd	3 rd	4 th	5 th	5 th	6 th	6 th	7 th	7 th	

The following five intervals must be employed (as essential notes) with much greater circumspection:

1.	2.	3.	4.	5.
				
Minor 2 nd	Perfect 4 th	Augm ^d 5 th	Augm ^d 6 th	Major 7 th

Among all these intervals, there are four, (the minor third, the major third, the minor sixth, and the major sixth,) the use of which in two-part harmony is much more frequent.

The unison and the octave are used very rarely. They may be used in final cadences and from time to time to commence a new period.

The perfect fifth also is not very much used; but as it produces more harmony

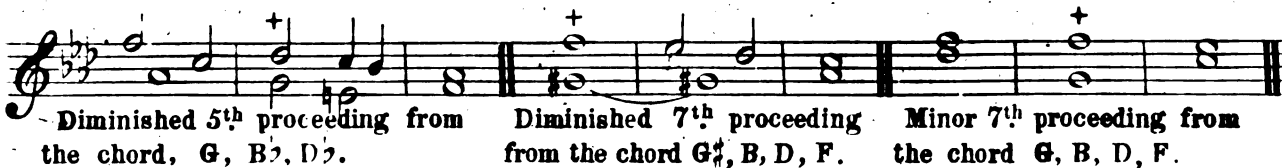
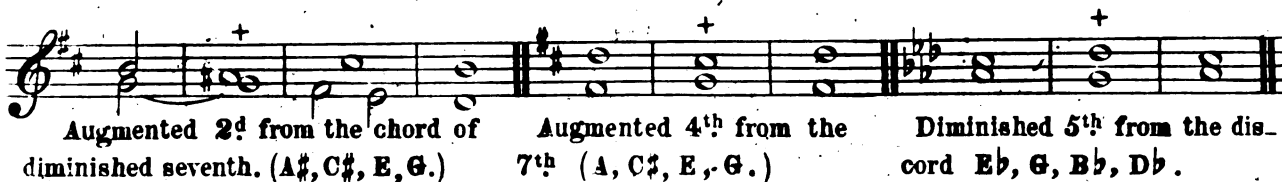
than the unison and the octave, it may be more frequently employed. The other intervals, being dissonant, always require resolution and frequently preparation.

EXAMPLES OF THE MANNER OF EMPLOYING THE DIS- SONANT INTERVALS IN TWO-PART HARMONY.

The major second, proceeding from the discord A, C \sharp , E, G, in the first example, and from A, C, E, G, in the second and third examples, following.

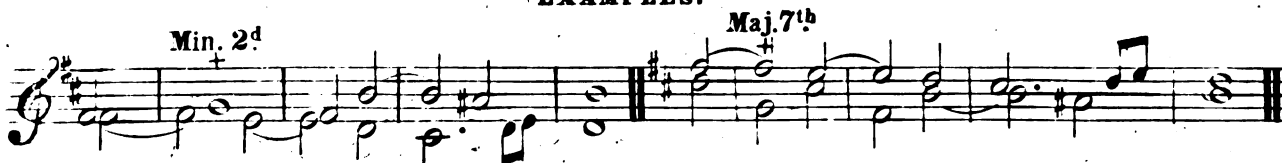


It will be right to prepare the major second, as well as the minor seventh, which is the inversion of it.

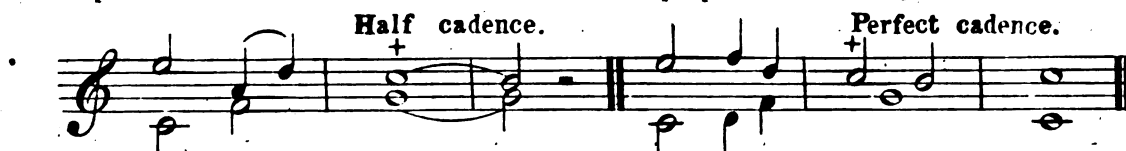


The minor second must be prepared and resolved regularly. It is the same with the major seventh, which is the inversion of it.

EXAMPLES.

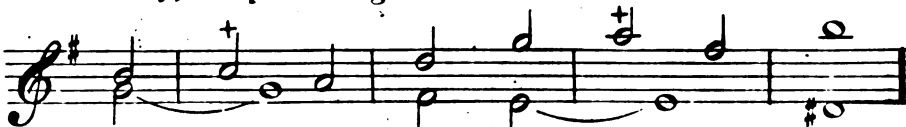


The perfect fourth cannot be used without preparation, except in cadences.

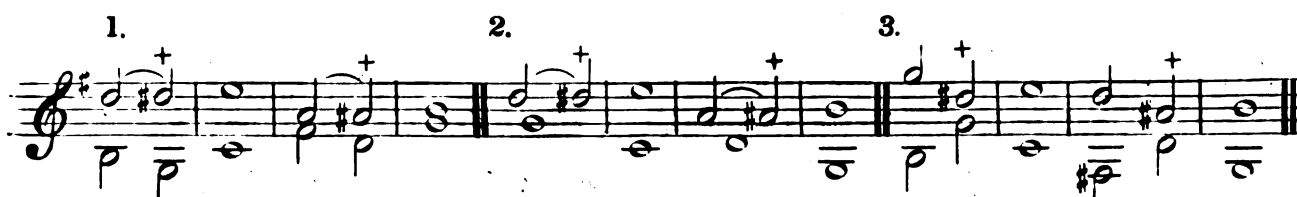


In every other case it must be prepared. It is commonly employed after the major or minor third only, as proceeding from the seventh of the second or third species.

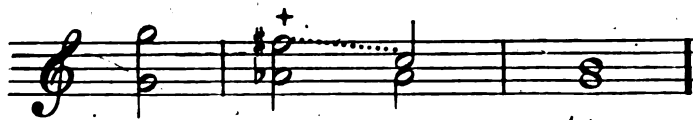
EXAMPLE.



The augmented fifth may be employed when it is preceded by the minor third, by the perfect fifth, or by the minor sixth. For example:



The augmented sixth may be employed even without preparation; but, before the resolution, the sixth must be changed into a third in the following way:



It must be observed further, that all these intervals may at the same time be employed as accidental notes, among which the following *suspensions* must be remarked as the most used.

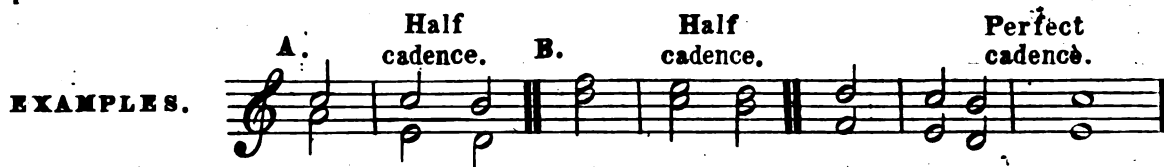


By inverting these three suspensions we have the three following:

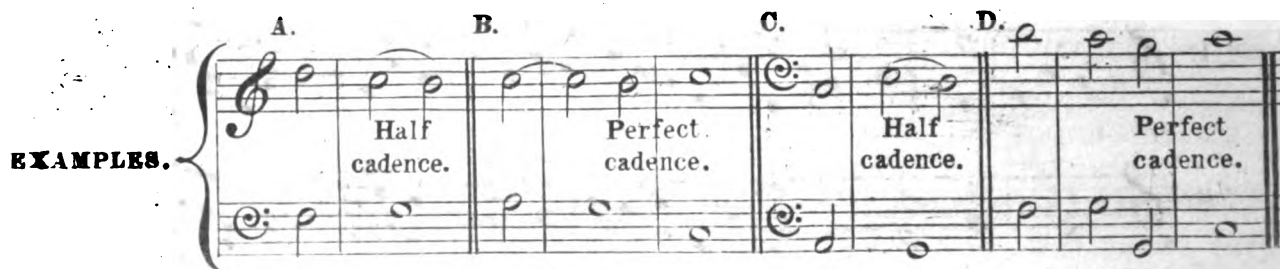


In two-part harmony, the cadences are made in the following manner:

1st When the duo is for two high parts, as two *sopranos*, two *violins*, two *clarinets*, two *hautboys*, &c. the half cadences may be terminated in thirds and sixths, and the perfect cadences in sixths.



2nd But when the duo is for two low parts, as two *base voices*, two *violoncellos*, two *bassoons*, &c., the cadences must be made as everywhere else, namely, by chords without inversions. The same is the case, when the duo is composed for a high part and a low part.



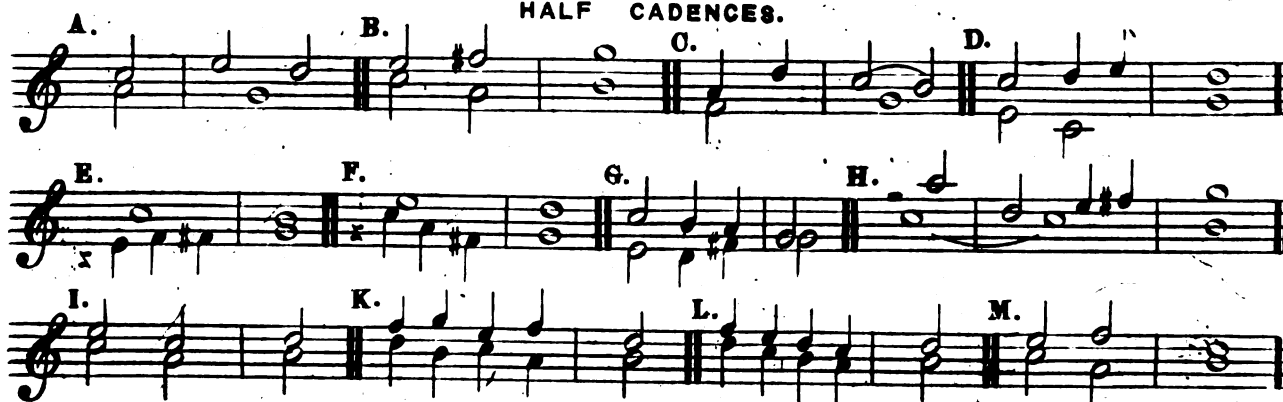
These last four examples may also be employed occasionally in the termination of duos for two high parts.

HERE FOLLOW SOME FORMULÆ OF CADENCES IN TWO PARTS.

PERFECT CADENCES.

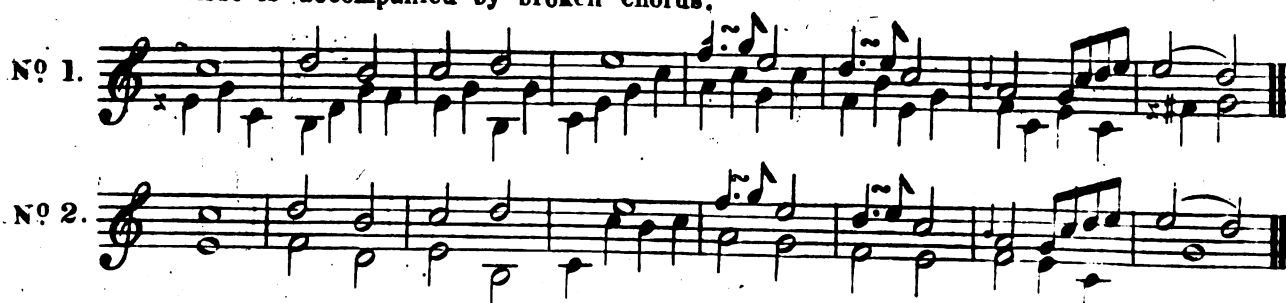


HALF CADENCES.



When broken chords can be employed in duos, the harmony of them is only the more interesting, because the chords become more complete by the succession of their respective notes.

Everybody will feel the difference existing between the two examples following, of which the first is accompanied by broken chords.



A duo may be accompanied by a base alone or by the orchestra: in this case, the rule directs that the harmony, considered without the accompaniments, must be correct and as pure as in duos not accompanied. Indifferent harmonists often offend against this rule, particularly in opera-duos where everything proceeding from the stage fully engages the attention of the auditor and should consequently be as nearly perfect as possible.

A simple harmony in two parts may be varied in different ways by means of passing-notes, appoggiaturas, syncopations and suspensions.

EXAMPLE.

THEME.

1 Var.

2 Var.

3 Var.

4 Var.

5 Var.

6 Var.

7 Var.

8 Var.

9 Var.

10 Var.

11 Var.

(112) There is a very marked difference between a *trio* and a *duo* accompanied by a base: in the former, every part is equally important, because the interest of the piece should consist in the three-part harmony; in the latter, the interest is only in the two-part harmony, and the base plays but a secondary part which it should be possible to do without. — R.

To conclude this article, we shall add here the following examples of two-part harmony, to serve as patterns for students.

Nº 1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

A musical score for piano, consisting of 23 staves of music. The measures are numbered 21 through 43. The notation includes various musical symbols such as treble clefs, key signatures (one sharp and one flat), time signatures, and various note values (quarter, eighth, sixteenth notes, rests). The music is written in a single system, with measures 21-22 on the first staff, 23-25 on the second, 26-28 on the third, 29-30 on the fourth, 31-32 on the fifth, 33-34 on the sixth, 35-36 on the seventh, 37-38 on the eighth, 39-40 on the ninth, 41-42 on the tenth, and 43 on the eleventh staff. The score ends with a double bar line and a repeat sign.

A note prolonged during several measures cannot have place in one of two parts but when the chords are broken in the other part.

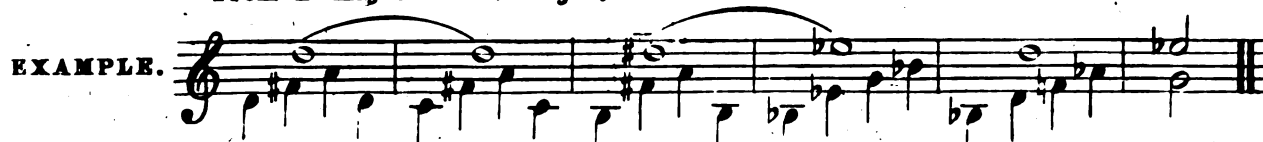


Broken chords must likewise be employed when one of the two parts has a predominant melody, inverted in the first place without regard to the second part.



The upper part here attracting all attention to itself is isolated from the second, and therefore the latter must be responsible as it were for the whole harmony, which would be too vague and too naked without broken chords. By means of broken chords, modulations of every kind, even enharmonic modulations, may be made in a Duo.

From D major to E \flat major.



Harmony in two parts may be employed everywhere successfully, in the *trio*, the *quartett*, *quintett*, and in the orchestra, where each part may be doubled and tripled in the octave above and below.



The same harmony tripled.



This way of doubling and tripling the harmony by the mass of the orchestra may produce the greatest effect.

DIDACTIC OBSERVATIONS ON HARMONY IN TWO PARTS. ⁽¹¹³⁾

Good harmony in two parts has certain artifices peculiar to it. Limited in its means, it is on that account but the more delicate, especially as to the choice of intervals. We possess few precepts and few true patterns of this kind of harmony. The reason of this is, perhaps, because this matter has scarcely been touched upon in treatises on composition, or because the little that has been said on the subject is not what should have been said.

ON INTERVALS.

It is certain that the best intervals, and which must be the most employed in a duett, are the following:



Furthermore, the last two intervals must be used but very seldom, because they do not produce harmony. Besides these seven intervals shewn above, we may employ with success the ten intervals following:



(113) This appendix on two-part harmony, which the author wrote as a preface to his violin and violoncello duets, is here subjoined, because, although comprising many things already mentioned, it nevertheless contains much that is new and calculated to render the whole work more complete. — C. [The author himself here advises learners to read the little treatise now referred to, Opera 84, published by Gambaro, Paris.]

But, in order to use them well, and produce good harmony with them in two parts, it is necessary to observe strictly the indispensable principles contained in the analysis of the following examples:

A TABLE SHEWING THE WAY OF EMPLOYING THE TEN PRECEDING INTERVALS.

Nº 1. Use of the minor 2nd or 9th



Nº 2. Use of the major 2nd or 9th



Nº 3. Use of the augmented 2nd



Nº 4. Use of the perfect 4th



Nº 5. Use of the augmented 4th



Nº 6. Use of the false [or diminished] 5th



Nº 7. Use of the augmented 6th



Nº 8. Use of the minor 7th



Nº 9. Use of the diminished 7th



Nº 10. Use of the major 7th

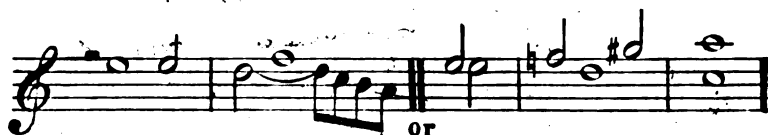


In E^b.



ANALYSIS OF THE PRECEDING EXAMPLES.

Nº 1. The E in the lower part, which makes a minor second or ninth with the upper part, is a suspension of D on which E resolves, and the E represents here the D on which it resolves. It is necessary to be able to put D in place of E, if desired, for example:

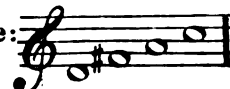


without which this interval would be faulty. It must also be observed that this E should be prepared, namely, be found as a concord in the preceding chord.

Nº 2. In the measure (a), the C, which makes a major second with D, is a suspension of B on which it resolves: it represents the latter note.

In the measure (b), G makes with A a major ninth, and is a suspension of F sharp on which it resolves.⁽¹¹⁴⁾ Every suspension must be prepared and resolved: it must fall on the strong time of the measure, and its resolution consequently on the weak time. Without these three conditions, a suspension can never take place. In the measure

(c), the C and D, as proceeding from the chord of the dominant seventh, for example:

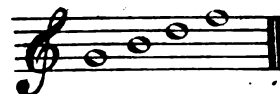


give an interval of a second which is good; but as C is here a discordant note, it must be resolved on B.

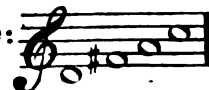
Nº 3. The B flat makes with the C sharp an augmented second. This interval must be employed, before its resolution, as shewn in the example under this number.

Nº 4. The F makes with C a perfect fourth. In the two measures (a) and (c), the F is a suspension which resolves on E. In the measure (b), it is the C which forms the suspension and resolves on B. The interval formed by B and F in this measure is

good, because it proceeds from the dominant seventh, for example:

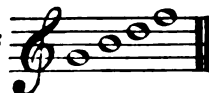


Nº 5. The C and the F sharp form an augmented fourth. This interval is good also, because it proceeds from the chord of the dominant seventh, for example:



but the F# resolves on G and the C on B.

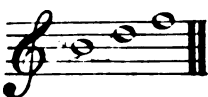
Nº 6. The B and the F, in the measures (a) and (b), form an interval of a false [or diminished] fifth, which is good as proceeding from the chord of the dominant seventh, for example:




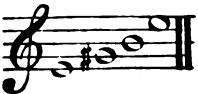
the B resolves on C, and the F on E. In the

(114) These notes are indeed at the distance of a ninth; but the discordant note and its resolution being in the lower part, the interval is more consistently called a second. See examples of the ninth, under Nº 10. following. - M.

measure (c), the interval between F and B is likewise good, because it proceeds

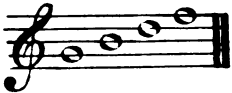
from the third triad of our system,  (commonly called the diminished triad, which must not be confounded with that which proceeds from the chord of

the dominant seventh,) or else from this other chord of the seventh;  this interval (as derived from the last two chords) is employed especially in minor

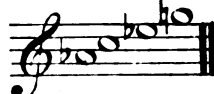
keys and resolved on the triad  as seen in the example belonging to this number.

Nº 7. The augmented sixth (F# and D#) in this example must be 1st, prepared by the octave; 2^{dly}, become a third (F# and A) before it is resolved; and 3^{dly}, the F should be resolved on the E, and the A on the G#, as seen in the example.

Nº 8. The minor seventh, G and F, found in the measure (a), proceeds from the suspension, where F represents E on which it resolves. In the two measures (b) and (c), the same interval is good, because it proceeds from the chord of the

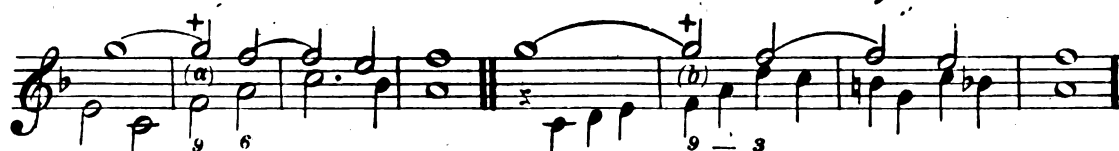
dominant seventh, for example: 

Nº 9. The diminished seventh, F# and Eb, is good, when the seventh Eb resolves first on the sixth, F#, D, and both notes proceed afterwards as seen in the example.

Nº 10. The major seventh, Ab and G, in the measure (a), is good, as proceeding from the chord of the seventh  the G resolves on F# and the

Ab rises or falls to D, and afterward these two notes proceed as shewn in the example. The major seventh is employed in the minor key. In the measure (b), the G is a suspension of F, but, before resolving, it falls to C (which forms a third with Ab,) which may be practised occasionally. In the measure (c), the G is again a suspension of the F on which it resolves immediately.

Besides the suspensions arising from the ten intervals which have been just analysed, we may also employ, but with moderation, the suspension of the ninth;



but the ninth must be resolved on the sixth, as in the measure (a), or else on the third, as in the measure (b).

By observing these rules, almost all the intervals of our system may be used in two-part harmony. If, on the contrary, one is ignorant of them, two-part harmony will become weak and poor, by making use of only thirds and sixths, and the perfect fifth and octave; or, if other intervals be used, without knowing perfectly well how to manage them, two-part harmony will become hard and insupportable to delicate ears.

We shall call *thirds, sixths, the octave, and the unison* the *primary* or *predominant intervals* of a *duo*, because they must be used the most frequently; and all the other intervals explained in the ten examples analysed, we shall call *secondary* or *subordinate intervals*, because they cannot be used without the others.

In a *duo*, the number of primary intervals must be *three-fourths* or at least *two-thirds* greater than the number of secondary intervals.


As the primary intervals are all concords, it is easy to conceive that a *duo* of a certain extent would become insipid, if the secondary intervals were excluded; I will not except even the perfect fourth, which doubtless, of all secondary intervals, is the only concord, because it is on account of this very consonance that so many composers have used it in the *duo* without preparation, and because this interval is absolutely inadmissible in two parts, if not treated as a discord and, as such, prepared and resolved. The discords act in a manner as a seasoning to the concords, rendering them more interesting and heightening their sweetness. But, on the other hand, they must be used with moderation.

By means of the small notes (*appoggiature*) which always produce their effect, when they are well placed, a different kind of discord is obtained.

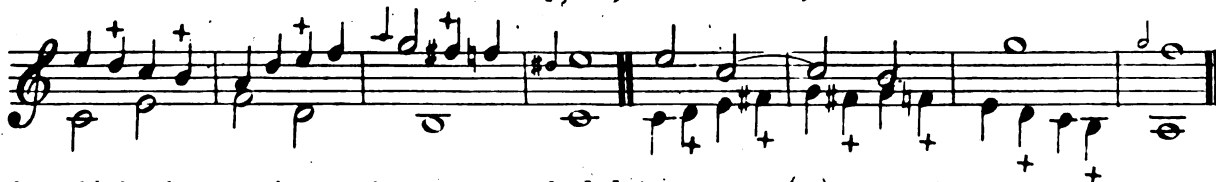
These small notes are as follows:



The small notes marked with a cross (+) are placed in a *duo* almost always before a note belonging to an interval of a third or of a sixth, or else before the augmented fourth, as in example (c), and before the false fifth below, as in example (e), especially when these last two intervals proceed from the chord of the do-

minant seventh:  the perfect fourth is good as an *appoggiatura*, see example (b).

Passing-notes give again another sort of discord not less important for the *duo* than for harmony in more than two parts; for example,



in which the passing-notes are marked by a cross (+).


As double-counterpoint in the octave may be employed with success in the duo, it is well to remark that all the following intervals are invertible;



and that the suspension of the ninth must be avoided, as well as the following three intervals:



But in treating of the perfect fifth and fourth of these three intervals as discords, namely as suspensions or as appoggiaturas, or else as passing-notes, these intervals become as good as the other invertible intervals.

The diminished fifth  when proceeding from the third triad (diminish-

ed triad), must be treated in double counterpoint in the octave as the perfect fifth. We shall give, at the end of this little treatise, an example of this counterpoint in two parts.

We often begin and conclude with a sixth, when composing for two voices or for two acute instruments. This cannot have place, when one of the two parts is a low part. In this case we must always begin and terminate with the interval of the octave or of the third:⁽¹¹⁵⁾ however we may also begin sometimes with the perfect fifth.

Two-part harmony is not always performed by only two voices or two instruments exclusively. Frequently choruses are composed in this harmony. The celebrated Marcello has written some in his *Psalms*, and Gluck in the chorus of priestesses of the *Iphigénie en Tauride*.

Two-part harmony is heard with pleasure in the orchestra, where it is often performed by all the instruments. In this case, being well constructed, its effect is always certain.

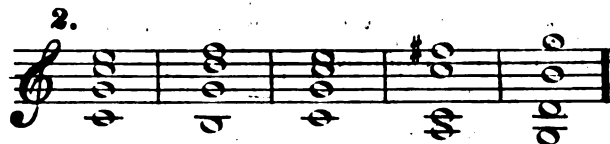
As two-part harmony is the most simple and consequently the clearest and most easily comprehended, it is not surprising that it is very interesting to the public. For this reason, composers should occupy themselves seriously with it, and use it more frequently than they do, especially when writing for the theatre; for the [skilful] mixture of two, three, and four-part harmony produces admirable variety, particularly when unison-passages are interspersed.

It must not be thought that two-part harmony is not in a condition to express all the notes of the chords. By striking successively all the sounds of a chord, we have the idea of a complete chord given to us; thus, for example, the passage here given:

(115) Yet it is not advisable to conclude a piece with the third, because that interval leaves something further to be desired; and this arises from the melody making only a half cadence on the third, and not a perfect cadence. (See what we have said on this subject in the *Treatise of Melody*.) — R.



produces on the ear nearly the following effect:



but with this difference that N^o 1. is more airy than N^o 2, which is in comparison more massive and consequently heavier. In the same manner the following example:



gives a correct idea of harmony in three parts, as: —



Another example,



which produces the following effect of harmony in four parts.



By means of these broken chords, two-part harmony (at least up to a certain point) can imitate that in three and four parts — a remarkable property by which two-part harmony, besides its own particular shades, possesses also those characterising harmony in more than two parts; ⁽¹¹⁶⁾ whence it follows that the composer can make us hear all the notes of a chord where he thinks it necessary, which happens, first, when he modulates; in which case the incomplete chords might become vague, not sufficiently determine a modulation, or else not sufficiently connect the different scales together:

(116) By means of broken chords, a single part may imitate harmony in two, three, or four parts. Different preludes for the violin alone, of the celebrated Sebastian Bach, have this quality, as well as the capriccios of Locatelli, Fiorillo, Nardini, &c. — R.

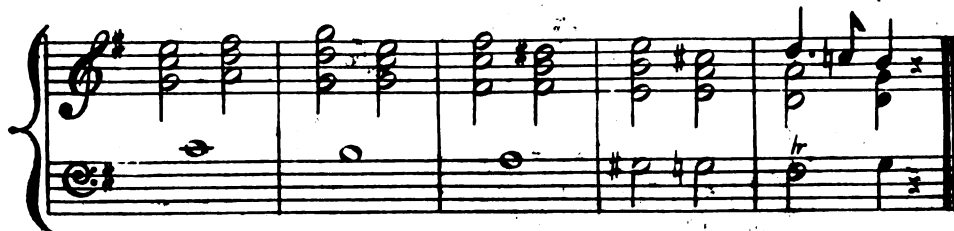
It is clearly shewn in Heck's Thorough Bass, p. 85. — M.

secondly, when a long succession of incomplete chords might produce monotony or emptiness which must be avoided: thirdly, to accompany certain passages of melody which require complete chords (as the two preceding examples), in order that the ear may be certain on what chords these passages are constructed.*

By means of these broken chords, we can moreover imitate the greater part of the harmonic progressions, for example:



which produces the effect of four-part harmony, thus:



Another example,



which makes the impression of the complete harmony following.



By the same means we may also sometimes employ the pedal (or organ-point) with success in two-part harmony.

When two-part harmony is executed by two solo voices or instruments, or in chorus, and the whole attention is fixed on the duo, the law then prescribes forming this duo according to the strictest principles of harmony in two parts without reference to the base or to the orchestra which may accompany this duo. In this case, the accompaniment must be looked upon as accessory or as added to the duo, and which the latter in strictness should do without. The majority of composers sin

against this rule. My illustrious countryman Gluck⁽¹¹⁷⁾ has not observed this principle in the choruses of priestesses of *Iphigénie en Tauride*. The two-part harmony of these choruses commencing with force from the scene on which all our attention is fixed, strikes our ear in a hard manner for want of a pure two-part harmony. To produce a good duo, its harmony must be composed first, without considering the accompaniment, which is not to be contrived till after the duo is finished. The duos of Clari, which are with reason the most esteemed, have nevertheless this fault, that the base which accompanies them, and which should be arbitrary, becomes indispensable in order to render the harmony complete. Frequently there is excellent harmony in three parts and not always in two. A duo should be perfectly distinguished from a trio, whether the former be executed with or without accompaniment.

We shall conclude these observations with the following example of harmony in two parts.

VARIATIONS IN DOUBLE COUNTERPOINT IN THE OCTAVE.

Larghetto.

VIOLINO.

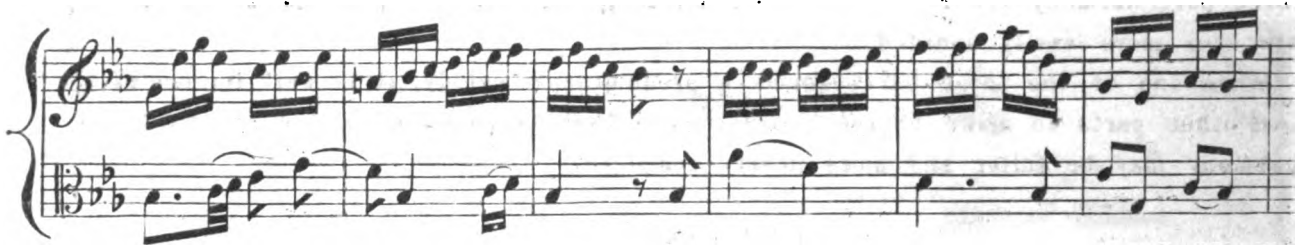
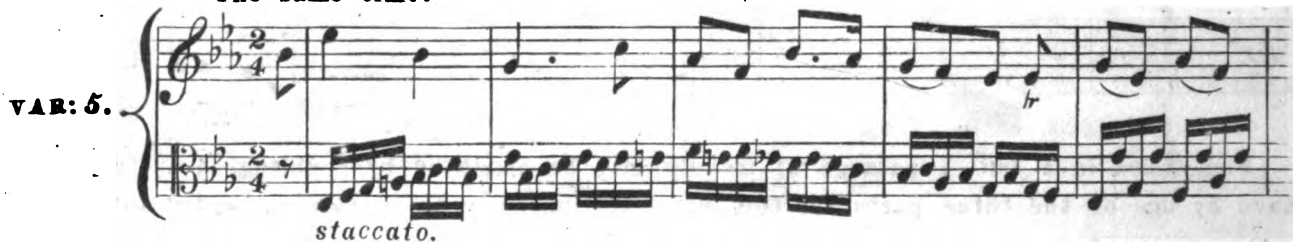
VIOLA.

VAR: 1.

(117) Gluck and Reicha were Bohemians. — C. Gluck was born on the borders of Bohemia in 1714, and died at Vienna in 1787. Reicha was born at Prague in 1770, and died at Paris in 1836. — M.

VAR: 2.

The musical score is written for piano (left hand) and violin (right hand) in B-flat major (two flats) and 2/4 time. It consists of two variations, labeled 'VAR: 2.' and 'VAR: 3.'. Each variation is presented in two systems of staves. The piano part is written in a grand staff (treble and bass clefs), while the violin part is written in a single staff with a treble clef. The notation includes various musical symbols such as notes, rests, beams, and slurs. The first system of 'VAR: 2.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The second system of 'VAR: 2.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The third system of 'VAR: 2.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The fourth system of 'VAR: 2.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The fifth system of 'VAR: 3.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The sixth system of 'VAR: 3.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The seventh system of 'VAR: 3.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The eighth system of 'VAR: 3.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The ninth system of 'VAR: 3.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The tenth system of 'VAR: 3.' shows the piano part with a series of eighth notes and the violin part with a series of eighth notes. The score concludes with a double bar line.

*Poco Allegretto.**The same time.*

ON HARMONY IN THREE PARTS.

Harmony in three parts is intermediate between that in two and in four parts. The cadences are regularly formed in it as in four-part harmony, namely, without inverting the chords of the tonic and dominant. Here must be remembered what we have said as to the suppression of a note in the chords; for all the discords (excepting two) being composed of more than three notes, it is evident that they can be employed only in an incomplete manner in three-part harmony.

Very often indeed, in regard to the resolution of the discords, we are obliged to suppress the fifth in the triads.

There are many harmonical progressions which are better expressed by three than four parts and in which a fourth part would be inconvenient and even forced. In three-part harmony the faults are more striking than in four-part harmony; but they are also more easily avoided.

When one of the three parts forms a predominant melody, it is well for one of the two other parts to make broken chords, when that is possible, to the end that the harmony may be fuller and more nearly complete.

EXAMPLE.



Sometimes in a *trio*, a passage of melody may be employed by doubling it in the octave by one of the three parts; in this case, the harmony is in two parts, but without making one of the parts of the trio cease.



The pedal, or organ-point, can be used in the trio, but only under a good two-part harmony.

In C major.

The musical score consists of two systems of piano accompaniment. The first system is in C major and features a 'Dominant Pedal' in the bass, which is a sustained G4 note. The right hand plays a series of eighth-note patterns, while the left hand plays a series of quarter-note patterns. The second system continues the same harmonic structure, with the right hand playing a more complex eighth-note pattern and the left hand playing a series of quarter-note patterns. The piece concludes with a final chord in C major.

Three-part harmony may be employed everywhere, in the *quartett*, *quintett*, in *choruses*, and in the orchestra, wherein every part may be doubled in the octave, provided the recurrence of two fifths in succession produced by the doubling do not there forbid it.

Simple harmony in 3 parts.

EXAMPLE.

The musical score consists of two systems of piano accompaniment. The first system is in C major and features a simple three-part harmony. The right hand plays a series of quarter-note patterns, while the left hand plays a series of quarter-note patterns. The second system continues the same harmonic structure, with the right hand playing a series of quarter-note patterns and the left hand playing a series of quarter-note patterns. The piece concludes with a final chord in C major.

The same harmony doubled.

The musical score consists of two systems of piano accompaniment. The first system is in C major and features the same three-part harmony as the previous example, but with each part doubled in octaves. The right hand plays a series of quarter-note patterns, while the left hand plays a series of quarter-note patterns. The second system continues the same harmonic structure, with the right hand playing a series of quarter-note patterns and the left hand playing a series of quarter-note patterns. The piece concludes with a final chord in C major.

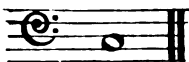
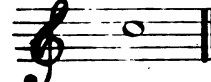
OF HARMONY IN FOUR PARTS.

Harmony in four parts is the most interesting: there is no striking and agreeable effect that cannot be expressed by it. The composer must be constantly occupied with it and it must be continually studied as the groundwork of all the others.

Four-part harmony should be considered under *three different points of view*; First, as accompanying a predominant melody in airs, concertos, and in general in all instrumental and vocal solos: it is the easiest species. Secondly, as serving the development of ideas in productions wherein every part is of the same importance, such as Haydn's and Mozart's quartetts, and finally wherever the fugued style is employed. Here it is that harmony plays the most distinguished part. Thirdly, as a means of producing great effect, with orchestral masses, principally in the symphony.

Every one of these three species requires a particular study. Care must be taken not to confound them, nor to employ one instead of another. In a piece of a certain extent, care must be taken not to let the four-part harmony be heard continually. Variety, which is the soul of music, requires on the contrary, that, from time to time, three and two-part harmony be substituted for it, and even passages in unison, especially in the orchestra.

It is further modified by different positions of the chords when a position more or less close is followed by a position more or less extended, and *vice versa*. This simple means, seemingly of so little importance, produces nevertheless a great effect. It

is evident that harmony continually confined between  and 

would soon become fatiguing by the continual repetition of the same sounds.

Four-part harmony must be treated with great simplicity, when accompanying a predominant melody; but that simplicity does not exclude variety. In this case, the chords are often struck in rapid arpeggio upwards (*plaques*) or shortly and separated by little rests. Sometimes a slight movement is made in one or several parts of the accompaniment. Sometimes, and when the melody allows it, short passages more or less striking are repeated many times in different keys or on different degrees of the scale. This work depends on *taste*, on *feeling*, and frequently on *caprice*.

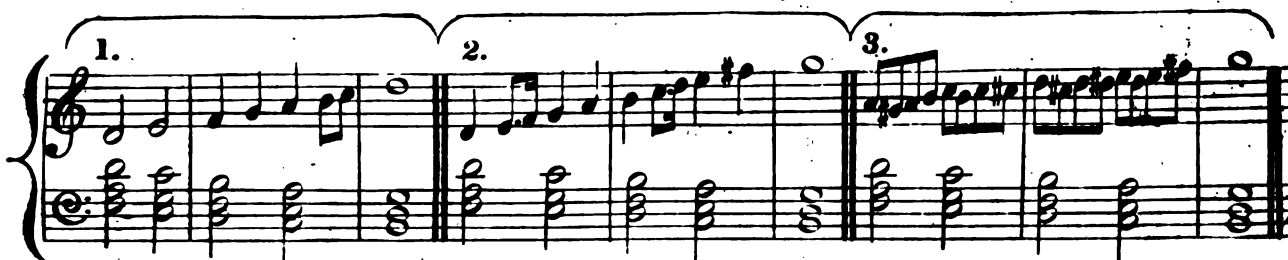
We have a great number of good patterns in this species, such as *Cimarosa's* operas and pre-eminently those of *Mozart*.

I adduce these two composers only, because one occupies the first rank among those who have written light and graceful accompaniment, and the other is eminently conspicuous for rich and varied accompaniments. In the quartett properly so called, it is not a single part that is to shine at the expense of the others: all the four must at the same time contribute to the total effect. Fine combinations and all the resources of the art must be employed in it in order to attain the true object. *Double counterpoint*, *imitations*, *canons*, the *fugued style*, (matters we shall treat of hereafter) will here find their place.

As for examples of four-part harmony, we have given sufficient in the course of this treatise.

We shall observe merely that the alto (or *viola*) should constitute the base of the harmony, when the *violoncello* performs the predominant melody, unless the violoncello part form at the same time a good base to the harmony placed above it.

It frequently happens that, by a predominant melody or by brilliant passages, the first violin seems to become isolated from the other parts; but in this case it must be accompanied in a more distinguished and more delicate manner, with newer turns of harmony and more careful movements than in ordinary solos. In general, common things are avoided in the quartett, and when a somewhat trite harmonical progression is employed, it is necessary to know how to disguise it, which is always possible. Thus, for instance, a succession of sixths, which assuredly is nothing new, may become interesting by the addition of a fourth part to it nearly in the following way:



The following progression, which is equally trite, may be disguised by adding a fourth part:



Four-part harmony is employed wherever compositions are written for more than three voices or three instruments,—in full pieces, choruses, quartetts, quintetts, sestetts, octetts, and in everything for the orchestra or with orchestral accompaniment.

It is moreover employed in works for the pianoforte, harp, and organ.

As to the manner of treating four-part harmony in the symphony, we shall speak of it hereafter in the article on the orchestra.

OF HARMONY IN MORE THAN FOUR PARTS.

In order to understand this article, it must be remembered that harmony in two, three, and four parts may be executed by five, six, seven, and eight different instruments (*at once*) without the harmony being really in five, six, seven, or eight parts.

EXAMPLE.

Two-part harmony, wherein the upper part is doubled.

Two-part harmony wherein each part is doubled.

Three-part harmony with the middle part doubled.

Three-part harmony with the highest and lowest parts doubled.

Four-part harmony, in which the highest part is tripled, and the second treble and the base are doubled.

In all these cases, the doubled or tripled part reckons as a single part only. Now it cannot be said that the harmony of this last example is in eight parts, although it requires that number of instruments to perform it.

It must be remembered also, that when a four-part harmony accompanies a predominant melody and the latter makes *real octaves* with any one of the accompanying parts, the harmony is not in five parts: it remains in four parts. For this melody is considered as a sort of prelude (or variation—O.) only, formed on the harmony, and not as a combination which would render this harmony really five-part. It is for this reason that the harmony is most frequently only in two, three, or four parts in the orchestra, although all the instruments be sounding at the same time.

To produce harmony really in more than four parts, real octaves in similar motion must not be found in it any more than forbidden fifths. Every instrument or every voice must be treated as an essential part. After this general remark, we shall pass in review the peculiarity of every harmony in more than four parts, commencing with five-part harmony, which is the best and clearest.

OF HARMONY IN FIVE PARTS.

Chords being composed of but three or four sounds (excepting the two chords of the ninth which are very rarely used with all their five notes,) it is necessary to know which notes may be doubled in every chord.

First, In the perfect triads, every note may be doubled and even tripled: the major third must be excepted when it becomes the *leading note*, because it requires a determinate resolution.



It is easily perceived that C sharp cannot properly be doubled here, because it must resolve by rising a semitone, and by doubling it there would necessarily be twice C sharp, D and consequently two forbidden octaves. In the diminished triad, B, D, F sharp, the B and D are commonly doubled, rarely F.



Secondly, In the discords, neither the discordant note, nor the note which has but one single resolution, is doubled.

Thus, in the following chord, E alone can be doubled, because the three other notes have a determinate resolution.



But if, instead of plain chords (*accords plaqués*,) as in the following example:



the same harmony is ornamented, it is then allowed to double the *leading note* and the discordant notes, because we have the power of changing these very notes before their resolution.

THE SAME EXAMPLE AS THE PRECEDING, BUT ORNAMENTED.

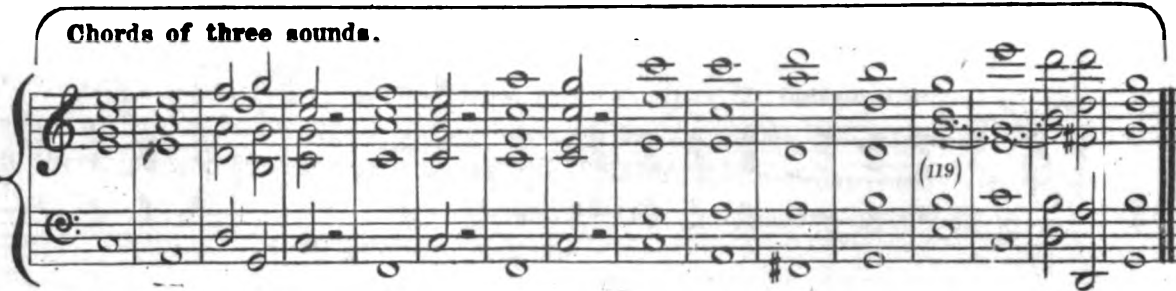


(118) Although we have spoken before of the doubling of notes in the chords, we have thought it essential to return to the subject here, in order to complete what was to be said on five-part harmony. — R.

This remark shows at the same time that harmony in plain chords is often more difficult than florid harmony, especially when writing in more than four parts.

Here follow examples of five-part harmony, in which all the chords of the classification are employed:

Chords of three sounds.

Nº 1. 

Chords of dominant sevenths. **Nº 3. Succession of dominant sevenths.**

Nº 2. 

Sevenths of the second species. **Nº 5. Sevenths of the third species.**

Nº 4. 

Sevenths of the fourth species.

Nº 6. 

Nº 7. 

Succession of chords wherein the four sevenths are used.

(119) The G continues in the same part: it is the B which falls to E. — R.

or else.

Nº 8.

Sequence of sevenths.

Nº 9.

Complete chord of the major ninth.

Nº 10.

Complete chord of the minor ninth.

Nº 11.

The same chord without its root.

Nº 12.

Chord of the augmented fifth.

Nº 13.

Chord of the augmented 5th with the 7th

In five-part harmony, it is allowed to resolve the chord of the augmented sixth in the following way, although it offers unavoidable hidden octaves.

Nº 14.

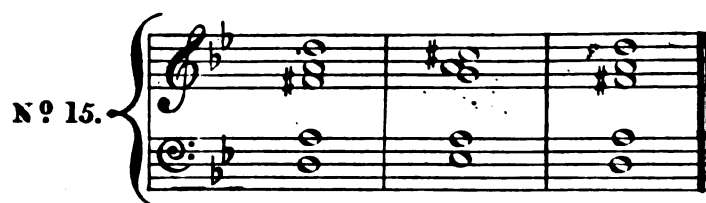
or

or

Perfect minor cadence.

Perfect major cadence.

In the chord of the augmented fourth and sixth, only the root can be doubled, for example:



FIVE-PART ORGAN-POINT.



It is well to remark that, by employing suspensions in five-part harmony, the suspension 9 - 8 may have place between two high parts.



Harmony in five real parts is already too complicated to be employed continually in a piece of music. It must be interrupted from time to time by harmony in four, three, or even two parts; but it is not indispensable to silence two or three instruments in order to produce three or two-part harmony. Three-part harmony can be produced with five instruments, by doubling two parts in the octave.



In like manner, two-part harmony can be produced with five instruments, by doubling one of the parts and tripling the other. It is obvious, that, to produce four-part harmony, only one part is to be doubled. This variety in the use of five instruments yields the following modifications:

- 1st Two-part harmony, executed by two, three, four, or five instruments.
- 2nd Three-part harmony, executed by three, four, or five instruments.

3rd Four-part harmony, executed by four or five instruments.

4th Five-part harmony.

There is a remarkable difference between five-part harmony and the other three executed by five instruments: five-part harmony always making the chords to be heard with all their notes, the result is a fulness and complication in the parts which may at length become wearisome.

Two, three, and even four-part harmony, being less complicated and consequently clearer, we may obtain by using them, without lessening the number of instruments, a variety in the quintett, not weakening the effect which five instruments playing at the same time should produce.

Five-part harmony is used in full pieces for five voices, in *quintetts* for five instruments, in choruses in five parts, particularly in church-music, and sometimes in the symphony. Pieces are also written in five parts for the organ and pianoforte.

REMARK.

I have thought it necessary to place here some reflections on the manner of considering pieces in two, three, four, and five parts, known under the designation of duetts, trios, quartetts, and quintetts. The more the resources existing in the means, the more effects may be found and the more they can be varied. This principle is true; but it must not be thence inferred that a trio is more difficult to compose than a quartett. From this reasoning it would follow that a duo, which offers still fewer resources than a trio, would on that account merely present more difficulties than a symphony, since in the latter species all the riches of the art are at the disposal of the composer. This consequence would be a paradox; for if the abundance of means gives rise to a greater number of effects, the multiplicity of chances and combinations resulting from them progressively increase the difficulties.

Melody, harmony, their combinations and resources, and finally the union of both, constitute the substance of every musical composition. This substance undergoes greater or less modifications, according to the number of parts employed; now, the invention of melody (taken alone) not being more difficult in a quartett than in a duo or a trio, it is therefore the harmony which makes the difference of the species and which increases proportionally the difficulties.

Every species has its peculiarities, which require a particular study. Haydn was asked why he never composed quintetts: this great man ingenuously replied that he did not know what to do with the fifth part. It would be ridiculous to suppose that this was a want of means in his case, the cause must therefore be attributed merely to a want of practice.

When a composer has not been occupied with three-part harmony and the way of treating it, but on the contrary has worked continually at four-part harmony, a trio will appear in fact more difficult to compose than a quartett, because, wanting practice in that sort of piece, he would wish to find in the one the resources and riches of the other, which is impossible. (120)

OF HARMONY IN SIX, SEVEN, AND EIGHT PARTS.

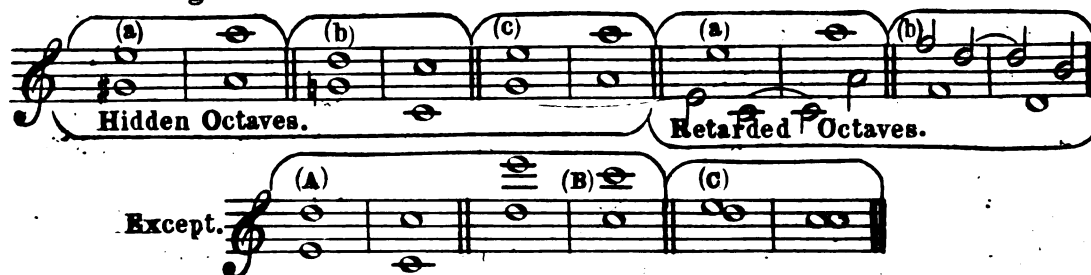
In order that harmony may be in five *real* parts, not only consecutive fifths but also octaves must be avoided in similar motion; and this it is which increases the difficulty of it.

There are chords which cannot be employed in harmony in six, seven, or eight parts, because it is impossible to resolve them regularly without making octaves.

The best chords (and it may be said the only ones) to form harmony in six, seven, and eight parts are the perfect major triad, the perfect minor triad, the diminished triad, and the four chords of the seventh.

Among the accidental notes, the passing-notes, suspensions, and organ-point only are employed. Before giving any examples, we will remark that by reason of the difficulties which every moment occur in the connection of the chords, we are frequently obliged to tolerate in harmony of more than five parts:

1st Hidden and retarded octaves, especially between the high and middle parts, among others the following:

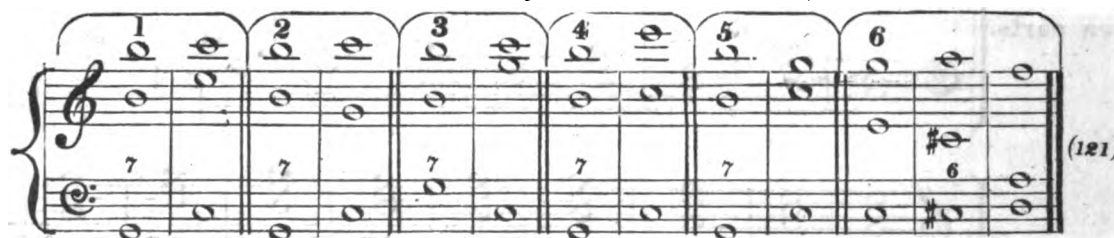


(120) Besides the reasons here stated why, with an additional number of instruments, the difficulties are rather increased than lessened, it must be remarked that even the subjects and their development must be more grand, and in general differently treated, in proportion to the number of performers, than in the case of compositions for few instruments.

It is true the composer is not prohibited from forming Solos, Duos, Terzets, &c. on noble ideas, nor from introducing such into them; but, on the other hand, when writing for a Sextett or for an Orchestra, he should not employ thoughts which are suitable only for the combination of a Duo or of a Trio. Thus, for example, among Beethoven's numerous Quartetts, Quintetts, Sonatas, and Trios, — most of which are so grand both in their opening and in their development, — we scarcely find one whose commencement and general design would be suitable to a regular Symphony or an Overture; and even the themes of his Concertos have, with deep reflection, been exclusively chosen and adapted to their object. The greater the masses which the composer requires for setting forth his work, the broader must be the conception and general conduct of it; for each species of composition must have its own peculiar style and remain true to its character. Hence, there is nothing more important and instructive than for the talented student to exercise himself as much as possible in *every* species, and betimes endeavour to invent all kinds of ideas and effects, classifying them according to their respective peculiarity; so that he may possess a stock of opening and middle subjects, melodial phrases &c. for future development, which may perhaps be of use to him at a subsequent period. — C.

The last is always bad, because the discord, D, seems to resolve twice on C by similar motion, and consequently to make two consecutive octaves.

2^d The doubling of the major third as leading-note, provided the doubled note be resolved in two different ways, for example:



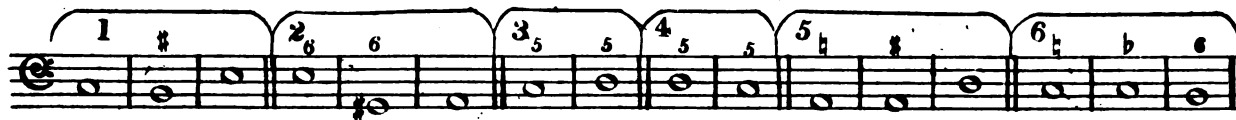
3^d The false reaction between two middle parts, for example:



4th The hidden fifths between the middle parts:



All these licences are almost inevitable, particularly in modulations and in successions of chords, such as the following:



Chords are in general less difficult to connect, so long as we continue in the same key, hence we advise students, when they change the key, to quit the harmony in six, seven, or eight parts frequently; and substitute that in five or in four parts.

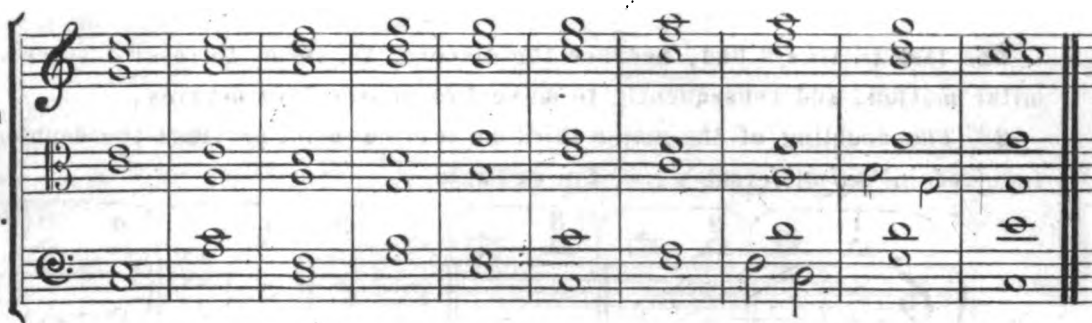
HERE ARE NOW SOME EXAMPLES

A succession
of perfect triads
in six parts.



(121) This last example (6) is practicable between the base and a middle part only, or else between two middle parts, and never between the base and the upper part.—R.

A succession
of perfect
triads in
seven parts.



A succession
of perfect
triads in
eight parts.

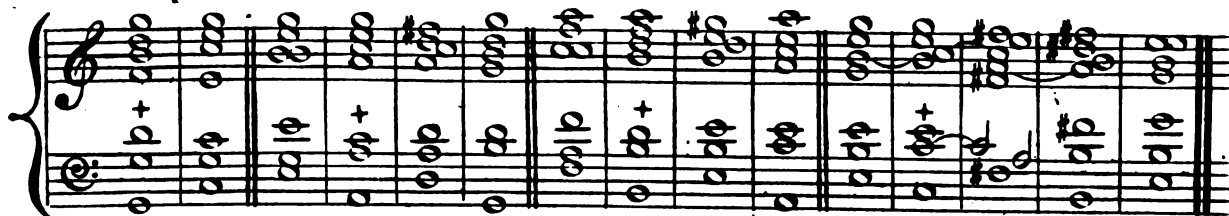


In 6 parts. 7th of 2nd Species. 7th of 3rd Species. 7th of 4th Species.

Use of the four chords of the seventh.



In 7 parts.



In 8 parts.



All these chords may take place in all their inversions.

A SUCCESSION OF CHORDS OF THE SEVENTH

1st Chords not inverted. 2nd Inverted chords.

In 6 parts.

In 7 parts.

In 8 parts.

In the use of passing-notes, we advise students, not to let the number of parts which make passing-notes exceed the number of those which make plain chords. Thus for example, in six and in seven-part harmony, passing-notes are made in three parts only, and in eight-part harmony, in four parts only at the same time.

Harmony in six, seven, and eight parts is imposing by its mass: it excludes whatever does not possess dignity; it marches but does not run. With a quick succession of notes and chords, it would produce but confusion. Too rapid movements in this case are worthless for the same reason.

The movements *Moderato*, *Andante*, *Lento*, *Largo*, and *Adagio* are the only ones that can be employed in it. Passing-notes should not be of less value than quavers in *Moderato* and *Andante*, nor of less value than semiquavers in *Largo* and *Adagio*.

In 6 parts..

Musical score for 6 parts, measures 1-8. The score is written for three systems of three staves each (treble, alto, and bass clefs). The music features various note values including eighth and sixteenth notes, and rests. The key signature has one sharp (F#). The first system ends with a double bar line.

In 7 parts..

Musical score for 7 parts, measures 1-8. The score is written for four systems of three staves each (treble, alto, and bass clefs), with the final system containing only two staves. The music features various note values including eighth and sixteenth notes, and rests. The key signature has one sharp (F#). The first system ends with a double bar line.

In 8 parts.

Lento.

This musical score is for 8 parts, marked *Lento.* It consists of two systems of three staves each. The first system shows the beginning of the piece with various rhythmic patterns and melodic lines. The second system continues the composition, featuring more complex harmonic structures and melodic development. The notation includes treble and bass clefs, key signatures, and various musical symbols such as notes, rests, and accidentals.

Another example in 8 parts.

This musical score is another example for 8 parts. It consists of two systems of three staves each. The notation is more complex than the first example, featuring a variety of rhythmic patterns and melodic lines. The score is written in a style that emphasizes harmonic structure and melodic development. The notation includes treble and bass clefs, key signatures, and various musical symbols such as notes, rests, and accidentals.

(122) In order not to multiply clefs, we have used in all these examples but three. Here there is no question of the scales of voices or of instruments, but of harmony without other conditions.—R.



The best suspensions, and it may be said the only ones, that can be employed in the high parts are 9-8, 4-3, 7-6. The principal note and the third only may be suspended in the perfect triads, and the third only in chords of the seventh. In the base, the third only is suspended, in perfect triads and in chords of the seventh. The other suspensions can be practised but very rarely; indeed we advise that they be not employed.

EXAMPLES.

In 6 parts.



In 7 parts.



In 8 parts.



As the suspended notes can rarely be doubled below and never above, this produces a new difficulty in the connection of the chords, especially in eight-part harmony, in which we are obliged to triple and quadruplicate the notes which are not suspended, and to make, as we see, hidden octaves every moment. For this reason, double suspensions are rare in harmony in more than five parts.

EXAMPLES WITH THE ORGAN POINT.

In 6 parts.



In 7 parts.



In 8 parts.

The image displays two systems of musical notation, each consisting of four staves. The notation is in a single key signature (one flat) and features a variety of rhythmic values, including eighth and sixteenth notes, as well as rests. The parts are written in a way that demonstrates complex harmonic textures, with some parts featuring rapid sixteenth-note passages. The first system shows a dense arrangement of notes, while the second system continues the harmonic development with similar complexity. The staves are connected by horizontal lines, indicating the flow of the music across the systems.

It is allowed, and often indeed necessary, to make the parts cross, as seen in the preceding examples.

Although in these harmonies only chords of three sounds (major, minor, and diminished triads) and the four chords of the seventh can be used, this number of chords is sufficient to create an interest in them, since they may be continually renewed by modulations.

Harmony in six, seven, and eight parts, offers the following inconveniences:

1st The parts are continually too close together, injuring the vibrations of the voices and instruments, and stifling one another.

2^d The position of the chords cannot be varied, which introduces monotony.

3^d The great complication of the parts renders this harmony painful and difficult to comprehend.

In order to employ it therefore, it must frequently be interrupted by harmony in four and five parts; and it must not be used but in music which is to be performed in a large place.

It is usually composed for voices singing in chorus, and where every part ought to be at least quadruplicated, requiring consequently thirty-two voices for that in eight parts.

After all that we have now said as to the difficulty of inventing harmony in six, seven, and eight parts, it is sufficiently obvious that it would, without a reasonable object, be

giving oneself useless trouble to wish to increase farther the number of real parts.

We have said above, that the great difficulty of harmony in more than five parts, consisted in avoiding open consecutive octaves. By allowing them, harmony in six, seven, and eight parts would be scarcely more difficult to write than that in four or five; but it would cease to be a *real* harmony in six, seven, or eight parts.

IMITATION OF HARMONY IN MORE THAN FIVE PARTS.

The harmony which is only an imitation of that in more than five parts is less restrained, easier to compose, and richer than that in six, seven, and eight real parts, because all the chords in use may be employed in it, and their position be more varied.

The analysis of the following piece will make known the peculiarity of this harmony.

1st Chorus in florid counter-point. 2nd Chorus in strict counterpoint on a plain chant.

The musical score is arranged in two systems. The first system, labeled '1st Chorus in florid counter-point', features a 1st Treble part with a melodic line and a 2nd Treble part with a more active line. The Tenor and Base parts provide harmonic support. The second system, labeled '2nd Chorus in strict counterpoint on a plain chant', features a 1st and 2nd Treble part with a plain chant melody, a Tenor part, and a Base part. The Organ and Thorough base or basso continuo parts provide harmonic support. The lyrics are 'Re-gi-nae coe-li lae-ta'.

-ta re, al
 -gi na coe li, lae ta re, al
 coe li, lae ta re, al
 -li lae ta re, al le
 re, al le
 re, al le
 re, al le
 re, al le
 re, al le

7 6/5 6/4 5 7 5 5/3 6/4 5 7

le lu ja, qui a quem me

le lu ja,

le lu ja, qui a

lu ja, al le

lu ja, qui a quem me

lu ja, qui a quem me

lu ja, qui a quem me

6 6 7 6 4#

4 4 # 5 b

--- ru --- is --- ti.... por... ta
 qui - a.... quem.... me... ru... is... ti por... ta
 quem.... me... ru... is... ti por... ta... re,
 --- lu... ja, qui a.... quem me... ru... is
 --- ru --- is --- ti por... ta
 --- ru --- is --- ti por... ta
 --- ru --- is --- ti por... ta

6 7 6# 7 6 6 7 7b

re, al le lu

re, al le

al le

ti por ta re, re sur re xit....

re, al le

re, al le

re, al le

5 4^b 2 6 6 7 6 6

[illegible]

al le lu

lu

di xit, al le lu

le lu

si cut di xit al le lu

si cut di xit al le lu

si cut di xit al le lu

6 b b⁶₅ 5 4^b₂ 6 6 5^b₄ 3 6 7

ja, o...ra pro.... no...bis de...

ja, o...ra pro.... no...bis de...

ja, o...ra pro.... no...bis de...um al...

ja, o...ra pro.... no...bis de...

ja, o...ra pro.... no...bis de...

ja, o...ra pro.... no...bis de...

ja, o...ra pro.... no...bis de...

7 6 6# 7 7

um, al le

um... al le lu ja, al

le lu ja, al

um, al le lu

um, al le

um, al le

um, al le

um, al le

6 6 6 4 5 6 5 6 6 7 b

lu ja, al le lu ja.

le lu ja, al le lu ja.

le lu ja, al le lu ja.

ja, al le lu ja.

lu ja.

lu ja.

lu ja.

6 7 6 6 6 6 6 7

4 4 5 4 4 3

The foundation of the preceding composition is four-part harmony in plain chords.

The rest is only a variation of the same harmony. The three upper parts of the first chorus frequently form octaves or unisons (which are equivalent) with the three upper parts of the second chorus. The base of both choruses is the same, excepting that the base of the first is occasionally varied by passing-notes.

By examining each chorus separately, it gives real four-part harmony written correctly; consequently this piece may be performed in the three following ways:

- 1st With the chorus in strict counterpoint alone.
- 2^d With the chorus in florid counterpoint by itself.
- 3^d With both choruses united.

The organ which accompanies this piece is a second variation of the same harmony. By adding an orchestral accompaniment to it, we might have besides a third variation.

Thus, by means of all these variations, it is, as we see, very possible to imitate harmony in eight parts, although the foundation be really only harmony in four.

This last remark leads us immediately to the following article, which is one of the most important.

OF THE WAY OF TREATING HARMONY WITH THE ORCHESTRA

To compose for the orchestra depends at the same time on imagination, taste, habit, experience, on the particular knowledge of all the instruments, on the genius and even the caprice of the composer. It is therefore impossible to prescribe exact rules on the way of setting a piece in score. If thirty skilful harmonists were to express the same ideas by the orchestra, the result would be thirty different scores which might all be equally good; but this great variety does not prevent us from giving general principles on the art of managing the orchestra, nor from indicating the numerous resources afforded by harmony in this species of composition.

PRELIMINARY REMARKS.

1st There are great and small orchestras, namely, such as are composed of a great or of a small number of musicians.

2^d There are complete and incomplete orchestras, namely, such as have all the instruments in use, or others in which some of them are wanting.

3^d There are orchestras composed of skilful performers, and others formed of inferior musicians.

All this should be taken into consideration, when a composer is writing specially for an orchestra.

The complete grand orchestra, naturally intended for a large space, consists of *violins, altos, violoncellos, double-bases, flutes, hautboys, clarinets, bassoons, horns, trumpets, trombones and drums.*

A composition in which there are a great many details, too many notes, a too rapid motion of the parts, a too quick succession of chords, and a complication in the harmony produced by too much attention to minutiae in the construction of the parts, produces no effect.

In a large space, all this produces but a hum drum noise, which speaks nothing to the mind and affords but little pleasure to the ear. As everything in it becomes small, the composer

must take care to enlarge everything as much as possible.

(A) Large and moderate movements; (B) passages in unison; (C) a noble and decided melody; (D) occasional passages of a majestic melody in the base, and always gravity in the progress of this part; (E) great masses, provided they be not of too long duration and do not degenerate into noise; (F) little rapidity in the succession of chords; (G) finally, whatever has nobleness and simplicity — all these will never fail to produce a good effect.

In writing for a small orchestra, commonly intended for a small space,⁽¹²³⁾ the loud and noisy instruments, such as trumpets, trombones, and drums, must almost always be omitted.

Here it is necessary besides to treat the other wind-instruments rather in solo than in masses, otherwise they would most certainly overpower the stringed-instruments, which ought always to predominate in orchestras: the reason of it is that the power of the stringed-instruments is not in proportion to that of the wind-instruments, and that eighteen or twenty of the first are too weak for ten or twelve of the latter.

It is obvious that if we are writing for an incomplete orchestra, the instruments which it does not contain must not be employed.

The composer should further pay attention to the quality of the orchestra for which he is writing, and proportion the difficulty of his music to the ability of the performers.

A complete orchestra is divided into two parts or two masses — into stringed-instruments and wind-instruments.⁽¹²⁴⁾

The most important of these two masses is that of the stringed-instruments: it forms the body of the orchestra and may be called its *quartett*.

Harmony in four parts is the basis of an orchestra; but it is often interrupted by harmony in two or three, and by passages in unison.

All these harmonies may be doubled, tripled, or quadruplicated, according to the force, more or less, which the composer wishes to impart to them.

The stringed-instruments (or the *quartett*) frequently play without being accompanied by wind-instruments. Indeed a great number of compositions exist composed for this *quartett* alone. In this case, we have no other remarks to make than those already made above in speaking of harmony in two, three, and four parts.

But by adding wind-instruments to this *quartett*, very many combinations result which deserve to be pointed out, in order to shew the great resources which the orchestra offers to the composer.

(123) We insist on the influence which the space or locality may exert on the music; for it is a fact that there is a great difference between a piece of music performed in a small, and the same piece performed in a large place. I have often remarked this phenomenon with surprise: a piece producing great effect in a small place cannot do so in a large one; but on the contrary, the music which produces effect in a large space may still do so in a small one, by omitting the too loud instruments when they have been added merely to increase the strength of the mass. — R.

(124) We have named before what instruments are used in the orchestra. The small flute, (*flauto piccolo*) trumpets, trombones, and kettle drums, are only employed to augment the effect in the *forte*. These instruments, not being of the first necessity, because reckoning almost for nothing in the harmonical combinations, are not here considered as making part of the mass of wind-instruments, but we shall speak of them separately further on. — R.

THE WAY OF TREATING WIND INSTRUMENTS IN SOLO. ⁽¹²⁵⁾

Let a single wind-instrument, for example a *bassoon*, be taken and added to the quartett: if this *bassoon* be to serve merely to vary a little by its tone that of the stringed instruments, it may simply double one of the parts of the quartett. ⁽¹²⁶⁾ If it be desired to make it more prominent it may have a melody or motion different from that of the four parts of the quartett: this is done by means of notes of other values.

If the *bassoon* is to engage the hearer's attention more particularly, it will play a solo more or less long, and the stringed instruments will then serve as accompaniment; and this accompaniment may form a duett, trio, quartett, or even a quintett, thus offering the following changes:

1st In duett.

Bassoon and first or second violins.

Bassoon and altos (or tenors.)

Bassoon and bases.

2^d In trio.

Bassoon and the first and second violins.

Bassoon and altos and a violin-part.

Bassoon, bases, and altos; or with bases and one of the violin-parts.

3^d In quartett.

Bassoon, the two violin-parts, and the altos.

Bassoon and bases, altos, and one violin-part.

Bassoon, bases, and the two violin-parts.

4th In quintett.

Bassoon and the four parts of the stringed instruments; and as the base-part in an orchestra is performed by violoncellos, and by double-bases, the violoncellos may be employed alone the double bases alone, or else both together, in these accompaniments.

By substituting another instrument—clarinet, hautboy, flute, or horn—for the *bassoon*, the like changes may be obtained, excepting that the high instruments, as the hautboy, clarinet, and flute do not double the base of the orchestra.

We shall here give some examples of the different ways of combining a wind-instrument with the quartett of the orchestra.

The upper stave of all these examples represents one of the following five wind-instruments—flute, hautboy, clarinet, French horn, or *bassoon*:

(125) Those presuming solos which resemble the solos of concertos are not in question here; but what is considered is only to make such or such an instrument heard from time to time, because the variety of their tones imparts greater attraction to the music. — R.

(126) A part is doubled in the octave above, in the octave below, or else in the unison, according to the compass and pitch of the instrument with which it is desired to double it. — R.

Nº 1.
WIND INSTRUMENT.

1st Violin doubled.

Orchestra
quartet.

Nº 2.
WIND INSTRUMENT.

2nd Violin doubled.

Orchestra
quartet.

Nº 3.
WIND INSTRUMENT.

Alto doubled.

Orchestra
quartet.

Nº 4.
WIND INSTRUMENT.

Separate melody in order to make the wind instrument more prominent.

Orchestra
quartet.

IN DUETT.

Nº 5.
WIND INSTRUMENT
SOLO.

One of the
 parts of the
 quartett.



IN TRIO.

Nº 6.
WIND INSTRUMENT
SOLO.

Any two parts
 of the quartett.



IN QUARTETT.

Nº 7.
WIND INSTRUMENT
SOLO.

Three parts of
 the quartett.



IN QUINTETT.

Nº 8.
WIND INSTRUMENT
SOLO.

1st and 2nd Violins.

Complete Quartett

Altos & Bases.



Nº 9.
Wind-
Instrument
Solo.

Complete
Quartett.

In these last two examples, the quartett must form a pure and complete four-part harmony. This harmony may be more or less rich, the motion of the parts more or less complicated: all this is at the will of the composer, provided he is always clear.

A wind-instrument may also be accompanied by all the stringed instruments in unison. In this case the harmony is but in two parts.

Nº 10.
WIND INSTRUMENT
SOLO.

Stringed instru-
ments in unison.⁽¹²⁷⁾

By accompanying a deep wind-instrument (such as the bassoon) with violins alone, that accompaniment is most frequently found above the melody. In this case, the melody must at the same time form a good base to the harmony; and if it were not adapted to fulfil this essential condition, it would then be necessary to accompany it by the bases of the orchestra. This way of accompanying a deep instrument, by others proceeding above the melody, is extremely delicate and often requires a great many artifices in the harmony; but also, when it is employed well, it produces very pleasing effects. If, for example, it were desired to accompany the preceding melody in this manner, remarkable difficulty would be found in doing so. This melody ends on the note A, and exactly at this point must be a repose on the dominant triad (D, F#, A,) which requires the note D in the base, or at least the note F#, for the A in the base would give the chord $\frac{6}{4}$ which on the contrary would destroy the repose in a disagree-

(127) The word unison does not signify merely doubling, tripling or quadruplicating a melody in the same case, but also in several octaves at once. — R.

able manner. What should be done then? In this case, the bases of the orchestra must be made to fall in upon the note D, placed below the A which terminates the melody, for example:

IN TRIO.

Bassoon alone, forming at the same time a good base to the harmony.

Violins of the orchestra accompanying above the melody.

Bases of the orchestra.

N^o 11.

This may likewise be done in quartett, if more than two parts accompany above.

It is easier to accompany a deep melody by high instruments, when the bases of the orchestra proceed at the same time, for example:

Bassoon-solo, by way of middle part.

Orchestra quartett.

We shall recollect again in this place that consecutive octaves, between the melody and the parts of the accompaniment — the base excepted — are very allowable, when the quartett is complete.

But they are avoided when accompanying by one, two, or three parts only, as may be seen in the examples N^{os} 5, 6, 7, 10, and 11 preceding.

Sometimes the melody is doubled, by one of the parts of the accompaniment, in the octave above or below, according as the wind-instrument is deep or high in the scale.

The violoncello, which has something peculiar in its tone, particularly of the high strings, is sometimes treated like the bassoon, and little solos are frequently given to it. This may be done in two ways:

1st By causing these solos to be performed on a single violoncello: in this case,

the other violoncellos and the double bases form the base of the orchestra.

2^d By making all the violoncellos of the orchestra perform the solos together, and this is what is most frequently practised.

Thus by substituting violoncellos for the bassoon in N^{os} 11 and 12, these two numbers may serve as an example.

These are all the remarkable combinations which the orchestra-quartett offers with a single wind-instrument.

The same combinations may also take place, by accompanying one voice with the orchestra-quartett. ⁽¹²⁸⁾

After having shewn what may be done by adding a single wind-instrument to the quartett, we shall now examine the combinations resulting from the employment of two wind-instruments added to the same quartett.

The two wind-instruments may be of the same kind as two hautboys or two horns—or of different sorts, as a hautboy and a horn.

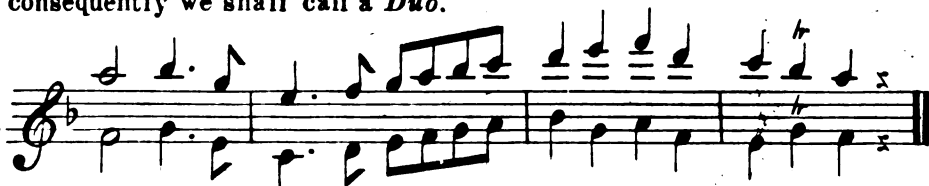
GENERAL RULE.

The two wind-instruments must form good harmony in two parts, irrespective of the quartett. As these two instruments—on account of the great difference in the quality of tone—strongly penetrate through the stringed instruments and attract the hearer's attention, it would follow, if they formed bad harmony with each other, that the ear would most certainly be offended by it, notwithstanding the quartett, with which both these instruments might nevertheless compose good harmony. This important remark applicable to all cases wherein several wind-instruments (or several voices) form harmony in two, three, or four parts. For the same reason, the quartett of the orchestra should always form good harmony in two three or four parts, irrespective of the wind-instruments or the voices.

It sometimes happens that two wind-instruments play in unison or in octaves: in this case they offer no other combinations with the quartett than those resulting from the use of one.

We shall here speak of the harmony in two parts which may be produced by two wind-instruments, and which consequently we shall call a *Duo*.

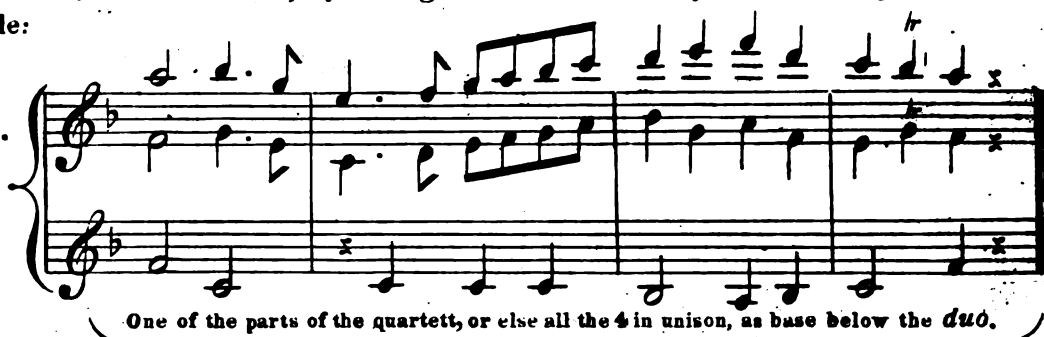
N^o 1.
Flute and horn alone.



(128) Persons not much accustomed to the orchestra are frequently surprised that a single wind-instrument or voice penetrates through the mass of stringed instruments, sometimes amounting to thirty or forty. This effect, quite surprising as it is, solely depends on the difference of tone; for a voice makes itself heard not only through this number of stringed instruments, but even in the midst of a complete orchestra, provided however that it plays not too loud, and yet this orchestra is sometimes composed of three or four hundred musicians, when performing oratorios in Vienna or in London. Such is the magic of this difference in the quality of tone! — R.

This *duo* may become a *trio*, by adding to it one of the parts of the quartett, for example:

N^o 2.
Flute and horn.



One of the parts of the quartett, or else all the 4 in unison, as base below the *duo*.

If the *Duo* were made by two deep instruments such as bassoons, and if we wish to accompany it by a violin-part, more pains must be taken with that accompaniment and it must be rendered more melodious, because it will be heard above the *duo*, for example:

AS A TRIO.

N^o 3.
Two bassoons.

Violin-part
above the *duo*



In this case, the two wind instruments may be reenforced by the altos or violoncellos in unison, which is sometimes practised.

As accompaniments of the kind given in this example might predominate over the *duo*, they must not be employed till after having allowed it to be heard once or twice without accompaniment. This way of accompanying must be treated as a variation of a phrase already known, and not be used at its first introduction.

Another example, in which the violin-part is placed as intermediate between both parts of the *duo*:

AS A TRIO.



The *duo* may form a quartett by giving it two parts of the orchestra for accompaniment.

AS A QUARTETT.

Nº 5.

Wind instruments.

Two parts of the orchestra, or else all the stringed instruments in *duo*.

The same example differently arranged.

AS A QUARTETT.

Nº 6.

Flute.

Bassoon.

Violin part placed between the two parts of the *duo*.

Base.

The *duo* will become a quintett or sestett by accompanying it by three or four parts of the quartett; but the harmony may always remain in four parts only:

AS A QUINTETT.

Nº 7.

Two wind instruments

Three parts of the quartett.

The violins may proceed above the *duo* without bad effect, when they produce simple notes only and as unassuming as in the preceding example.

Another example; in which the *duo* is *doubled* in the octave by two parts of the quartett.

Nº 8.

Two wind-instruments.

Three parts of the quartett.

The doubling may take place in different ways: it is sufficient merely to take care that the second part of the *duo* shall not become the highest part of the harmony, as this would change the character of the phrase. Here follow several ways:

A. In the octave below.

Wind instruments.

Stringed instruments.

B. In unison.

Wind instruments.

Stringed instruments.

C. In the octave above.

Wind instruments.

Stringed instruments.

D.

Flute.

Bassoon.

Violins.

Flute
and horn.

Violin.

Alto.



AS A SESTETT.

Nº 9.
Two wind-
instruments.

Complete quartett.



For two wind-instruments there are phrases in *duo* which are unfit for this kind of accompaniment, where all the parts are different one from another and seem to form a real harmony in 6 parts.

The following way, in which the *duo* is doubled in the octave, is often preferable.

AS A SESTETT.

Nº 10.
Two wind-
instruments.

Complete quartett.



If the two wind-instruments produced less regular passages of melody, but more brilliant than that of the preceding example, the quartett might accompany the *duo* in the following manner, where each part has a peculiar design:

AS A SESTETT.

Moderato.

Nº 11.
Flute.

Horn
in F.

Complete Quartett,
accompanying very piano.

AS A SESTETT.

Nº 12.
2 Wind
instruments

2 Horns.

2 Hautboys.

Complete Quartett.

In the last example, the wind-instruments serve merely to impart a little variety to the tone of the stringed-instruments, always permanent in an orchestra.

The combinations become less numerous, by adding to the quartett more than two solo wind-instruments; for three or four may give a complete harmony in three or four parts, irrespective of the stringed-instruments, which, employed at the same time and combined in a different way from that of the wind-instruments, might easily destroy the clearness.

HERE ARE EXAMPLES OF THREE AND FOUR SOLO WIND-INSTRUMENTS.

Nº 1.

Nº 2.

To these examples may be added the first or second violins, or the altos as middle part, in the following way:

To add to Nº 1.

To add to Nº 2.

The wind-instruments may be also doubled by three or four stringed-instruments in the unison or octave, or else in both at once.

If the harmony of the wind-instruments were so composed as to admit a second base, this second base might be executed by the bases of the orchestra or else by all the stringed-instruments in unison: for example:

3 Wind-instruments.


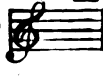
Bases of the orchestra, or all the stringed-instruments in unison.

We have now given what is most important to be known regarding the employment of solo wind-instruments in the orchestra. In this way they must be used in order to vary the character of tone and diffuse greater clearness through the harmony but they must be used with discretion and not too liberally.

The whole secret of the art of writing for the orchestra consists in their well-combined employment.⁽¹²⁹⁾

THE WAY OF TREATING WIND-INSTRUMENTS IN MASSES.

We have remarked above that the orchestra must be divided into two masses, one composed of wind-instruments and the other of stringed instruments. We have also said that a complete orchestra should have two flutes, two hautboys, two clarinets, two horns and two bassoons, giving (without reckoning the noisy instruments, of which we shall speak hereafter) ten wind-instruments, which, playing all together, have sufficient power to resist thirty stringed instruments and more. The two masses are employed together or separately. But before shewing how they are combined, we will treat of the mass of wind instruments apart.

These ten wind-instruments have a compass of sounds extending from B \flat  up to 

Hence the position of the harmony for wind instruments may be very various; and this is what must be observed when we are obliged to use them frequently in mass.⁽¹³⁰⁾

(129) It is a very good practice for the scholar to arrange single pianoforte pieces (and at first indeed easy and short ones) for other instruments: thus for example, any simple Theme, first for the stringed quartett, then with the addition of a wind-instrument, and then (if the melody of the theme permits) for wind-instruments alone. Afterward he can arrange whole sonatas (with the necessary alterations of passages) for a small, and lastly for a grand orchestra. The more he makes himself master of this preliminary exercise the easier will be the writing and instrumentation of his own ideas, which are often lost for want of skill in noting them down. C.
(130) In order to understand clearly the sequel of this article, it is essential to know the difference of the *Positions* which harmony may have in the orchestra. The more or less approximation or dispersion of the parts is called *Position*. We have already mentioned this on page 28. Here we shall speak of it with reference to the orchestra.

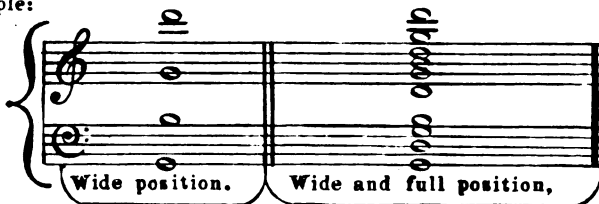
A *position* is *close* when the parts are contained within a single octave nearly.

A *position* is *wide* when the parts exceed the extent of three octaves.

We shall call that which is found between the two preceding ones an *approximate position*.

A *very wide position* is that which embraces the greatest possible extent.

A position is at the same time *wide and full* when the octaves included in its extent are filled by intermediate notes; for example:



One sees by this example that four instruments are sufficient to produce a *wide* position, but that eight, ten, or twelve are necessary that it may be at the same time *wide and full*.

From this remark it results that the distribution of the parts in the orchestra (with regard to position) may be indicated in the following manner:

1st The stringed instruments execute all the positions, excepting those which are at the same time full and wide.

2^{dly} The wind-instruments may sound all the positions without exception.

3^{dly} The wide position of the stringed instruments may at the same time become full, by adding the wind-instruments.

4^{thly} Any position whatever of the stringed instruments may be modified in many ways, by the addition of wind-instruments.

As these modifications give a perceptibly different colouring to the effects of the orchestra, it is important to be well acquainted with them and, consequently, to study all their combinations. — R.

There is a remarkable difference between the two masses (irrespective of the quality of tone) inasmuch as that of stringed instruments usually sounds but four different notes at the same time, whilst that of wind-instruments may sound ten; hence it follows that the latter may be doubled in various ways, as will be seen by the following examples:

2 Flutes. All the instruments in unison. Two-part harmony in a wide and full position.

2 Hautboys, and 2 Clarinets. 2 Hautboys in unison. 2 Clarinets in unison. (131)

2 Horns.

2 Bassoons.

If it were desired to give less compass to this two-part harmony, it might be so arranged in the following way, without the horns: (132)

Flutes and Hautboys
in unison.

Clarinets and Bassoons
in unison.

Two-part harmony in a close position.

Yet the horns—such as they are in the last example but one—may be added to the preceding, because they give a good base to the harmony.

Flutes and Hautboys.

Clarinets and Bassoons.

The notes of the horns, as
the instrument sounds them.

A less close position in regard to the horns.

(131) The second horn-part is added here, because we cannot make it execute one of the parts of the duo.—R.

(132) As the horn is a deep instrument, it always performs the notes given to it lower in pitch. It is therefore important to be acquainted with the pitch of this instrument in every key, in order not to be exposed to write a middle part for it which shall be deeper than the base of the harmony. See the compass and scale of the horn, page 312.—R.

Another example, in which the *duo* is tripled in three different octaves.

2 Flutes,
2 Hautboys.

2 Clarinets.

2 Horns.

2 Bassoons.

When it is desired to use all the wind-instruments in three-part harmony, care must be taken to triple the parts *equally*, in order not to give too much strength to one part at the expense of the others; for example:

2 Flutes,
2 Hautboys.

2 Clarinets.

2 Horns.

2 Bassoons.

Three-part harmony. Wide position.

This last rule suffers however some exceptions: sometimes the base is of a nature not to admit of being doubled by middle parts; sometimes we are obliged to omit the horns because, in certain cases, they have not notes enough to be employed. Besides, the importance of this rule diminishes, when the mass of stringed instruments comes to be united to that of the wind-instruments.

Frequently one of the parts of the harmony performs a remarkable passage of melody on which the composer would strongly fix the attention: he will succeed in doing so, only by strengthening that part by a more than sufficient number of instruments so as to make it predominate over the others. This effect corresponds to that of a picture in which, for the purpose of making the chief figure prominent and more striking, all the other figures are placed in the shade. Here follow some examples:

Three-part harmony in a wide position.

Flutes.
Hautboys and
Clarinets.
Horns.
Bassoons.

The melodious part of this example is quadruplicated in three different octaves.

The same example differently arranged and where the principal melody is equally quadruplicated, but in four different octaves.

Flutes and
Hautboys.
Clarinets.
Horns.
Bassoons.

Three-part harmony in a wide and full position.

Another example, of three-part harmony, wherein the melody is sextupled in five different octaves.

Flutes.
Hautboys.
Clarinets.
Horns.
Bassoons.

In order to produce these kinds of effects, it is necessary that the harmonical phrase should naturally admit of them and contain besides a passage of melody rather striking.

There are harmonical phrases which do not admit of an arbitrary inversion of the parts, because a succession of hidden fifths and octaves would result, — such is the phrase following:

Harmony in three parts,
in which the two upper
parts are not invertible.



In this case, as in this example, we must, by doubling or tripling, avoid placing the upper part below the middle part.

Flutes.

Hautboys.

Clarinets.

Bassoons.



Another modification of the same example, in which the base is not doubled by a middle part.

Flutes.

Hautboys.

Clarinets.

Bassoons.



OF HARMONY IN FOUR PARTS PRODUCED BY THE MASS OF WIND - INSTRUMENTS.

It is necessary to choose as much as possible (especially in four-part harmony) clear and simple phrases, when we employ a great mass of instruments. We will take as a pattern the following example:



Different ways of expressing the preceding example by the mass of wind-instruments.

	1 st Way.	2 ^d Way.
Two Flutes.		
Two Hautboys.		
Two Clarinets.		
Two Bassoons.		

If it be wished to add the horns to all the examples of this harmony, we must do as follows, because the horns have not the notes fit for producing exactly one of the parts of the quartett.⁽¹³⁹⁾

A.	B.
Good, in case the bassoons are not transposed an octave lower.	Good in the contrary case.

(139) On this subject, see the compass and nature of the horn, page 312. — R.

Since the author wrote, the brass-instruments have been greatly improved by the addition of pistons. See Niemitz on Military Instruments. — M.

3^d Way. 4th Way.

Flutes.

Hautboys.

Clarinetts.

Bassoons.

The high parts of the quartett are inverted, producing a wider position.

All the parts of the harmony are doubled in the octave, giving a wide and full position.

The principal melody is here performed by half the mass, in order to make it more prominent.

5th Way.

The same instruments.

In this last example, the deep part, performed by a single bassoon, would be too feeble and would require to be strengthened either by the double bases of the orchestra, or by a trombone.

When the passage of melody is in the base, as in the following example, doubling it by the upper part is almost always avoided; but if we would make it more striking, it may be doubled by the middle parts.

Flutes.

Hautboys.

Clarinets.

Bassoons.

All these ways of treating four-part harmony by the mass of wind-instruments are very good. They serve to alter the position of the harmony and to give it various changes of tone each of which has a peculiar effect.

We have seen that the two masses of the orchestra were employed separately, and that this successive use was a powerful means of varying the same harmony, especially by taking a wide and full position with the wind-instruments, after a close position with the stringed instruments.

We have nothing further to say in regard to these two masses taken separately.

COMBINATION OF BOTH MASSES OF THE ORCHESTRA.

ON THE WAY OF TREATING TWO-PART HARMONY BY BOTH MASSES OF THE ORCHESTRA.

In grand compositions, a whole mass must be sometimes considered as a single instrument; consequently, in two-part harmony, one part of the duo may be given to the mass of stringed-instruments, and the other part to that of wind-instruments, when the nature of the harmony is not opposed to it.

Here is a phrase of the kind in two parts.

The upper part of this passage may be given by the mass of wind-instruments, and the lower part by the mass of stringed-instruments. The contrary cannot take place but when the passage is written in double counterpoint⁽¹³⁴⁾ The double bases (the sounds of which are the deepest of the whole orchestra) making part of the mass of stringed instruments, the part which they execute must necessarily form a good base to the harmony. The inversion might take place in the preceding passage, because it is in double counterpoint, which is sometimes met with without being sought after.

(134) A harmony which admits of being inverted is called double-counterpoint. — R.

Flutes,
Hautboys,
& Clarinets.

Horns,
& Bassoons.

The same exam-
ple as the preceding,
performed as a duo
by both masses of
the orchestra.

String-Instruments.

Wind-instruments in three different octaves.

String-instruments in three different octaves, the double bases playing an octave lower than the violoncellos.

By this means we have two different unisons combined producing sometimes a great effect.

Flutes,
Hautboys,
& Clarinets.

Bassoons.

Horns added
to the duo.

Violins.

Altos and
Bases.

Two-part har-
mony rendered
complete by each
mass.

ON THE WAY OF TREATING THREE-PART HARMONY BY BOTH MASSES COMBINED.

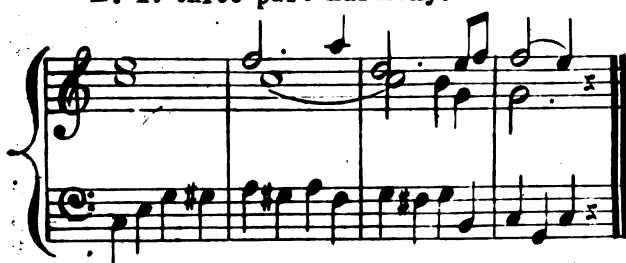
We have said above that a whole mass may be considered as a single instrument: as each mass may, likewise perform several parts of the harmony, these parts may be distributed in the trio in the following way, namely:

1st The two upper parts of the trio to the wind-instruments, and the third part (the base) to the string-instruments in unison. ⁽¹³⁵⁾

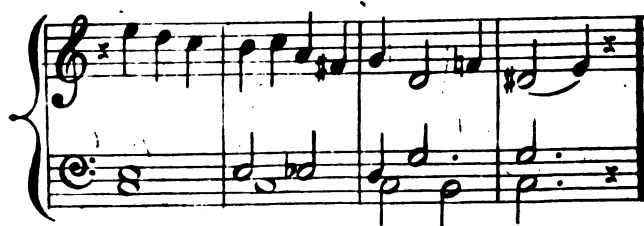
2nd The base and one of the upper parts of the trio to the string-instruments, and the other part to the wind-instruments in unison, when the last is a remarkable melody.

3rd The three parts of the trio to the wind-instruments, and the same to the string-instruments at the same time.

Nº 1. three-part harmony.



Nº 2. three-part harmony.



Harmony Nº 1. set for both masses.

Flutes.

Wind-instruments in duo,
in 3 different octaves.

Hautboys
and
Clarinets.

Wide position.

Horns
added.

Bassoons.

String-instruments
in unison, forming
the base of the trio.

Harmony Nº 2. set for both masses.

The same wind-instruments.

Wind-instruments in unison.

Wide position.

Two violin-parts.

The altos an octave above the bases

(135) This distribution is preferable when the lowest part of the trio contains a somewhat striking passage of melody. — R.

In the following examples, the above two trios are set for the two masses separated, completing the harmony in each mass.

Flutes and Hautboys.
Hautboys an octave below the flutes.

Clarinets.
Clarinets doubling the bassoons. (136)

Horns.
à 2

Bassoons.

Violins.
The altos with the violins an octave below, or with the bases an octave above.

Bases.

The same instruments.

The altos an octave below the first violins.

ON THE WAY OF TREATING FOUR-PART HARMONY BY BOTH MASSES COMBINED.

The following are the different combinations which this harmony admits with both masses.

1st The three upper parts performed in trio by the wind-instruments, and the fourth part (the base) by the string-instruments in unison.

2nd A high part executed by the wind-instruments in unison, (137) and the other three parts by the string-instruments in trio.

3rd Two parts by wind-instruments and the other two parts by the string-instruments, taking care to place in the latter the deepest part of the harmony, in order that it may be executed by the double bases.

4th The four parts performed by each of the two masses, as if they were to perform the quartett separately.

Harmony to serve for the 1st Combination.

Harmony to serve for the 2^d Combination.

(136) When the trio is to be performed by the wind-instruments alone, and more particularly when the bassoons express a passage of melody, it will be well to double the bassoons, by the clarinets, when it is possible.—R.

(137) It is evident that, in order to make this part prominent with so much power, it should be interesting.—R.

1st Combination. (138)2^d Combination.

Flutes.

Hautboys.

Clarinetts.

Horns added.

Bassoons.

String-instruments in unison, forming the base of the harmony.

Wind-instruments in trio.

Wide position.

Flutes, hautboys, & clarinets.

Horns added.

Bassoons in unison with the other wind-instruments.

First violin.

Second violin.

Altos added to the harmony.

Bases.

(138) The high parts of the harmony are as may be observed, inverted in the distribution of the mass of wind-instruments; and this may be done, when these parts execute plain chords only and when the base has the melody. If we do not wish to invert the order in which they are first presented, we may write as in the following example:

Flutes.

Horns.

Hautboys & Clarinets.

Bassoons.

This way is most frequently preferable in order to avoid forbidden fifths.

The bassoons, which in this case only double one or other of the high parts of the harmony, afford a bad base to the mass of wind-instruments; they can double them thus only when all the string-instruments in unison play the deepest part of the harmony, giving to this part a power more than sufficient to make it serve as a base to the mass of wind-instrument. — R.

The 3rd combination is not employed with success but when the four-part harmony produces by each mass a good two-part harmony, as in the following example:

Harmony to shew the 3^d combination.

The same harmony produced by both masses, each of which forms a duo.

Flutes in the octave, hautboys & clarinets.

Bassoons.

String-instruments.

Altos an octave higher than the bases.

In regard to the 4th combination, which consists in setting all parts of the four-part harmony in each mass, we are to proceed in the same way as we have shewn above in speaking of the wind-instruments taken separately, and we shall have, in this case, only to join this mass to that of the string-instruments.

Sometimes a long holding-note for the whole mass of wind-instruments in unison may be successfully placed on the dominant, while the string-instruments produce a two, three, or four-part harmony; but this harmony can be only the chord of the tonic and the chord of the dominant.

Example of a holding-note for all the wind-instruments in unison, doubling the G ten times, in five different octaves.

Flutes, Hautboys, Clarinets.

Horns & Bassoons.

Violins.

Altos.

Bases.

By adding to this holding note the loud wind-instruments such as trumpets, trombones, and kettle-drums, that note might be doubled fifteen or sixteen times, which would produce an extraordinary effect.

The G of the second bassoon and of the second horn is not, as it here appears to the eye, the deepest note of the harmony, the double bases playing an octave below the violoncellos, and the horns not admitting of being here transposed lower.

THE NEXT EXAMPLE MAY BE FOLLOWED IN AN EXTRAORDINARY CASE:

Passage of melody for the wind-instruments in unison, accompanied by the string-instruments.

Flutes,
Hautboys,
Clarinets.

Bassoons.

Violins.

Altos.

Bases.

Harmony on the organ-point may be written in two different ways for the two masses:

1st The pedal-note may be set for the mass of string-instruments in unison, and the harmony for the mass of wind-instruments; for example:

Flutes.

Hautboys.

Clarinets.

Bassoons.

String-instruments in unison, forming the organ-point.

Four-part harmony for the wind-instruments.

Organ-point on the dominant.

2^d The organ-point may be set for the deepest instruments of both masses in unison, and the harmony for the high instruments of both, for example:

Hautboys. Flutes an octave above the hautboys.

Clarinets.

Bassoons.

Horns & Trombones. These instruments are necessary in order to strengthen the pedal-note, which might be too weak, being played by the double bases only.

Kettle drums.

Violins.

Altos.

Violoncellos.

Double bases.

In order to give a correct idea of the quantity of sounds which all the instruments of a grand orchestra furnish at once, in a wide and full position of the harmony, we shall write these notes on three staves only, taking for this purpose the preceding organ-point.

This includes five octaves, namely from  up to  The ear seizing this

mass of sounds already with difficulty, although given almost in plain chords, it may be conceived what a bad effect would be produced by this mass, if the harmony were not dispersed, pure, and free.

When the string-instruments perform *quavers*, *triplets*, or *semiquavers*, and especially in quick movements, the wind-instruments must produce plain chords as much as possible; for example:—



Flutes.

Hautboys.

Clarinets.

Horns in C.

Bassoons.

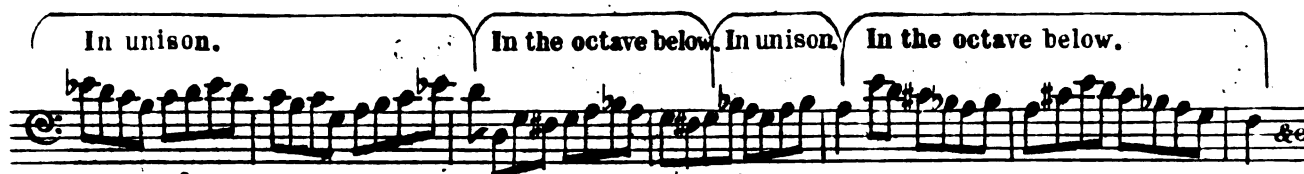
1st Violin.

2^d Violin.

Altos.

Bases.

However, it is allowed to double the string-instruments by the wind-instruments, preserving the same motion in the parts, provided it be not too rapid and can be easily executed. Thus the flutes, the hautboys, or the clarinets may proceed in unison with the first violins; the second violins may be doubled by the clarinets or bassoons; the altos by the flutes, hautboys, clarinets, or bassoons; and this may be done in unison, or in the octave above or below, according to the scale of the instrument. Sometimes, in order to facilitate the execution, this doubling is made partly in the unison partly in the octave. Thus the bassoons might double the preceding second violins in the following way:



All these changes in the use of wind-instruments have no other object but to express the author's ideas with variety and freedom.

The orchestral masses combined may be employed in overtures, symphonies, in the symphonies of airs and concerted pieces, in choruses, in dances and pantomime-music, in triumphal marches, and finally in everything where it is question of producing great effects and expressing powerful images; but, in every case, the employment of them must never be permanent, otherwise it would always degenerate into noise. In order that these masses may produce effect, they must be made use of at intervals after rests more or less long: eight, sixteen, or twenty-four measures in succession are always sufficient, yet in concluding they may be prolonged for a few measures more, because, if the attention is distracted or tired, the end at least of the piece prevents the weariness which would result.

After all these remarks, it is clear that the most disadvantageous way of treating an orchestra is to employ the masses incessantly, thus using up all resources at once, and depriving oneself of the means of varying the effects: all pieces have, in this case, the same colouring and resemble one another, notwithstanding the difference of ideas.

Choruses form still a mass apart: by uniting them to the complete orchestra we have three masses to treat at once.

When the chorus is not in unison, it should always form good harmony in two, three, or four parts, irrespective of the orchestra. It should be treated as one of the masses of which we have already spoken.

The complete orchestra is often too powerful for the chorus, which should then be accompanied by only one of the masses; and it is commonly that of the string-instruments which is chosen in preference for this purpose—chiefly in calm and soft pieces.

When the composer wishes to accompany a single voice with wind-instruments, they must be used as solo-instruments, namely, employing but one of each sort excepting in the terminations, where the whole mass may become necessary.

The orchestra in mass is imposing and but little adapted to light ideas; yet, as one is sometimes obliged to make use of it in compositions of this kind, it is necessary in this case:—

- 1st To avoid the shrill and noisy instruments.
- 2^d Not to choose, as much as possible, wide and full positions at the same time.
- 3^d To double the string-instruments simply in the unison by the wind-instruments.
- 4th To employ the *mezzo forte* in preference to the *forte*.

OF THE LOUD INSTRUMENTS.

Of all the penetrating and loud instruments, only the *trumpets*, *trombones*, small *flutes*, and *kettle-drums* are commonly admitted into grand orchestras. The others are good in the open air only, and should be banished from every room devoted to music.

The small *flute* is often too piercing, on account of its acute sounds, by which it predominates above all the other instruments. It should be used principally to vary the scale; and, for this reason, should not be abused, in order that the effect which it can produce be not lost when it becomes really necessary.

The *trumpets* are shrill instruments which must be used as seldom as possible. They, as well as the *trombones* and *drums*, are employed in the *forte* of the complete orchestra, in order to increase the effect and distinguish the masses.

These instruments are seldom used in *solo*. Yet, when they are combined with the horns, they are fit for expressing an idea of mourning. This effect is peculiar to brass-instruments; but it is necessary to find a four-part harmony in plain chords which they can execute freely, and to separate them from the other instruments of the orchestra, which by their approximation might prevent the full effect of them from being felt.

EXAMPLE.

Four-part harmony.

These are distributed in the following way:

Trumpets in C.

Horns in G.

Three trombones.

Drums in G and D.

In these kinds of combination, hidden and real fifths and octaves are inevitable, because the attention is obliged to be wholly directed to employ those notes only which these instruments can produce, and to avoid those which they have not or which they can produce but imperfectly.

ON THE EMPLOYMENT OF THE UNISON IN THE ORCHESTRA.

The unison plays a great part in the orchestra; it must be frequently used. When it is employed to express a melodious idea— an unconstrained air— its effect is always certain. It varies the harmony interestingly, by making it rest at intervals, without the orchestra's losing its power or fulness.

The unison admits of various modifications, namely:

- 1st The unison with the string-instruments alone.
- 2^d The unison with the wind-instruments alone.
- 3^d The unison with the string and wind-instruments united.
- 4th The unison varied in different ways; as for example:

N^o 1. Syncopated unison.

N^o 2. Unison varied by appoggiaturas.

N^o 3.

N^o 4. separated by rests.

N^o 5.

N^o 6.

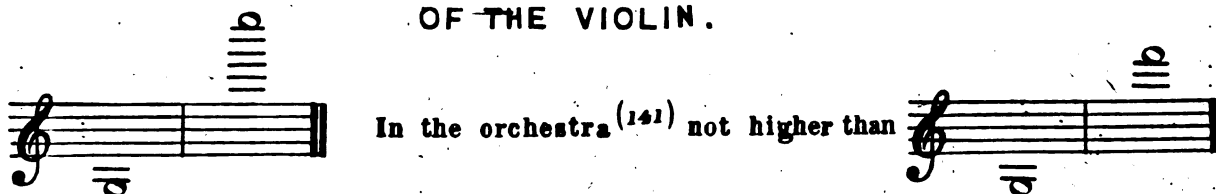
N^o 7.

N^o 8.

&c.

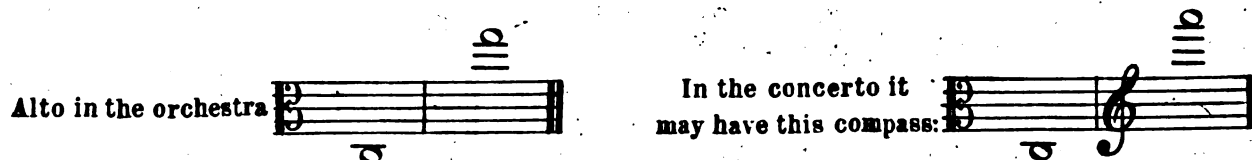
REMARKS ON THE DIFFERENT INSTRUMENTS COMPOSING THE ORCHESTRA.

It is indispensable to be acquainted with the compass and powers of the instruments for which we would compose; and it is an important study which ought not to be neglected. In vain should we hope to derive this knowledge from books: it must be sought in the orchestras themselves, and it is only by frequenting them and frequently consulting performers that it can be acquired. It is indeed the fruit of experience and labour. I am therefore very far from wishing to give a theory of every one of them here. Besides, this subject does not appertain to a treatise on harmony. I shall confine myself merely to indicating the compass, namely the number of sounds belonging to every instrument used in the orchestra, adding a few indispensable remarks. ⁽¹³⁹⁾

COMPASS OF THE STRING-INSTRUMENTS. ⁽¹⁴⁰⁾
OF THE VIOLIN.

The second of every instrument, when it plays with its first, has its part always written lower than that of the first, unless some particular cause necessitates a deviation from this rule.

OF THE ALTO, OR TENOR - VIOLIN.



OF THE VIOLONCELLO.

The violoncello has the same strings as the alto an octave lower. The tone of this instrument is remarkable, particularly in the high sounds; and for this reason *solos* are frequently given to it in the orchestra.



(139) For further information on the nature and capabilities of all the orchestral instruments, the pupil may consult Vol. 3 of Czerny's School of Practical Composition (3 Vols. folio published by Messrs. Cocks & Co.) *Ed.*

(140) When I mark this compass by the two extreme notes, it is because the instrument has all the intermediate notes, namely all the semitones included between these two notes. — *R.*

(141) The highest sounds of nearly all instruments are difficult to execute and cannot be produced without considerable skill. For this reason, the compass of instruments is more limited in the orchestra than in the concerto. Orchestral music should be of a nature to be performed at sight (*a prima vista*) but the concerto is studied. — *R.*

When the violoncellos are to play alone in the orchestra, namely, without the double bases, it must be indicated by the word *violoncelli*, which is understood as *violoncelli soli*. When the double bases are to rejoin the violoncellos, it is shewn by the word *tutti* or *bassi*. When the violoncello-solos are on the high notes, they are in preference written in the C clef on the fourth line.


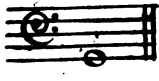


OF THE DOUBLE BASE.


The sounds of the double base are found naturally an octave lower than the written notes.

The double base is a very important instrument in the orchestra. It usually performs the violoncello part conjointly with the latter. This may always be done, when that part is written simply and the notes in it do not follow one another with too great rapidity. But sometimes the violoncellos have to perform scales little used, or difficult passages, which cannot be played by the double base. Sometimes also they have passages the effect of which would be destroyed, by the confusion always arising from the rapidity of the sounds on so deep an instrument.

Players on the double base have, it is true, the habit of simplifying the violoncello part and taking only the real notes of the chords; but to simplify a part, by duly passing over the notes which are to be omitted, and performing the others, with their necessary value only, requires time, meditation, and knowledge of harmony. The double base player, who frequently is not a harmonist and who in keeping the time has not leisure to reflect, must often be deceived. To composers therefore it belongs to do this work, and we advise them for their own sakes never to neglect it. In this case, they will write two base parts—one for the violoncellos, the other, as simple as possible, for the double bases.

There are double bases with three and with four strings. Those with four strings go down to E  but it is preferable to descend but to G  when the part for the double bases is written on a separate stave, because that in France and Italy only those with three strings are used. ⁽¹⁴²⁾

Note. In writing for string-instruments, double stops are frequently employed; in other words, the violin, alto, and violoncello are made to produce two, three, and even four different sounds at once. The pupil will do well not to attempt this until he is well acquainted with these instruments, to the end that he may not write things which it would be impossible to execute.

(142) The double bases used in England have also only three strings and descend only to  —Ed.

There are keys, even among those which are very much used, which would be impracticable on the clarinet, if we possessed but that in C: such are, for instance, the keys which have more than two sharps or two flats at the clef. The clarinet in B \flat , which transposes a whole tone, plays consequently in F when the piece is in E \flat ; that in A, which transposes a minor third, plays consequently in C when the piece is in A major. The B-flat clarinet serves therefore to diminish the number of the flats, and the A-clarinet to diminish the number of the sharps.

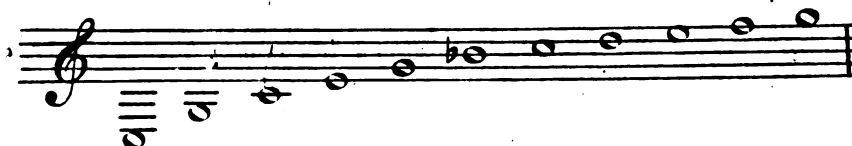
The composer chooses one or other of these three clarinets, according to the key in which his piece is composed, and endeavours so to choose as to have but a single accidental (rarely two) at the clef, although the key of the piece may require three or four for the other instruments.

HERE FOLLOWS A TABLE ON THIS SUBJECT.

Key of the piece	In C. (143)	In G.	In D.
	Clarinet in C	Clar: in C	Clar: in A.
Kind of Clarinet			
	In A.	In E.	In F.
	Clar: in A	Clar: in A	Clar: in C or Clar: in B \flat .
	In B \flat .	In E \flat .	In A \flat .
	Clar: in B \flat .	Clar: in B \flat .	Clar: in B \flat .

OF THE HORN.



Notes used in the Orchestra.



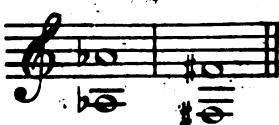

(143) This table will serve equally for the [relative] minor keys corresponding in the number of accidentals. — R.
0150

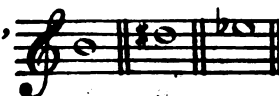
The same notes are sounded:

- 1st An octave lower, when the horns are in C.
- 2^d A seventh lower, when they are in D.
- 3^d A major sixth lower, when they are in E \flat .
- 4th A minor sixth lower, when they are in E \natural .
- 5th A perfect fifth lower, when they are in F.
- 6th A perfect fourth lower, when they are in G.
- 7th A minor third lower, when they are in A.
- 8th A major second lower, when they are in high B \flat .
- 9th A major ninth lower, when they are in low B \flat .

The 1st horn goes down only to  and the 2^d horn ascends only to 

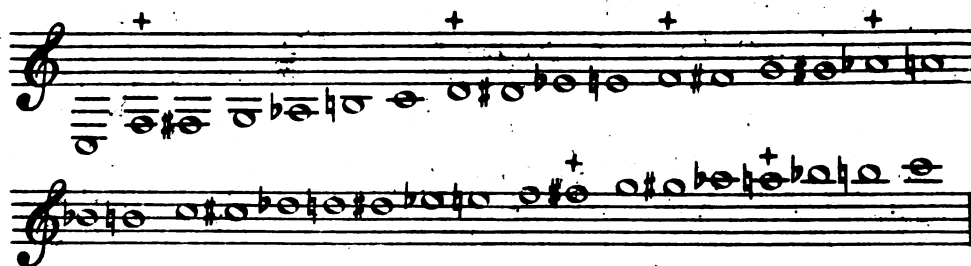
In the high keys such as G, A, high B flat, it is necessary not to ascend too high, especially with the second horn; and in the low keys, not to descend too low, especially with the first horn.

When the following notes  are preceded by the note G, for example: 

they may be employed with effect. In like manner, the following notes, 

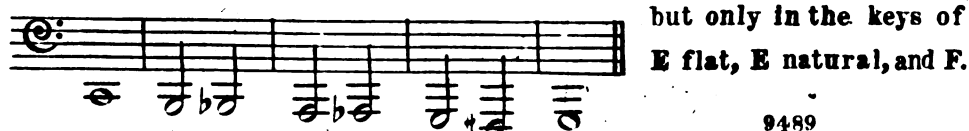
although weak, may nevertheless be made use of also, from time to time, but transiently and by resolving discords upon them.

In *solos*, the horns produce many other notes called stopped notes, as may be seen by the following scale, on comparing it with the notes used in the orchestra and which are all open, namely, produced without the assistance of the hand in the bell of the horn.



Among these notes, the six marked with a cross + are bad and cannot well be produced but transiently: they can scarcely be sounded independently.

In a slow movement, the second horn may produce the following eight notes:




1st With the horn in E \flat . 

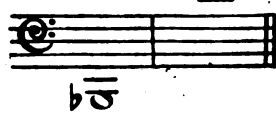
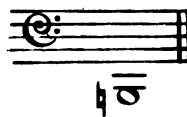

2nd With the horn in E \flat . 

3rd With the horn in F. 

The horn, as a deep instrument, may sometimes form the base of the harmony.


Frequently the first horn plays in one key and the second horn in another. This is done with a view to obtain a greater number of *open sounds*. For example, in a piece in D minor, one horn may be set in D and the other in F.


 OF THE BASSOON.

 The following note is entirely wanting  There are, besides, two other notes which must not be employed, because they are very bad ones, these are 


When the bassoon uses the high notes, its part is commonly written in the C-clef on the fourth line. This instrument serves as a base to the wind-instruments and often doubles the bases of the orchestra.

COMPASS OF THE SMALL FLUTE, OF THE TRUMPET, AND TROMBONES.

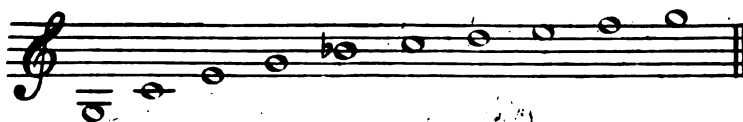
 OF THE SMALL FLUTE. ⁽¹⁴⁴⁾

 It has not been made to rise higher, excepting in the *fortissimos* of the masses, in which it may then ascend to G.

It always sounds an octave higher than the written notes.

(144) In orchestras the octave-flute alone is employed. Its entire compass can be used but in solos, for the notes included between  are too weak in the *forte* of the masses. — R.

OF THE TRUMPET.



The trumpets are commonly employed in C, D, and E flat only.⁽¹⁴⁵⁾

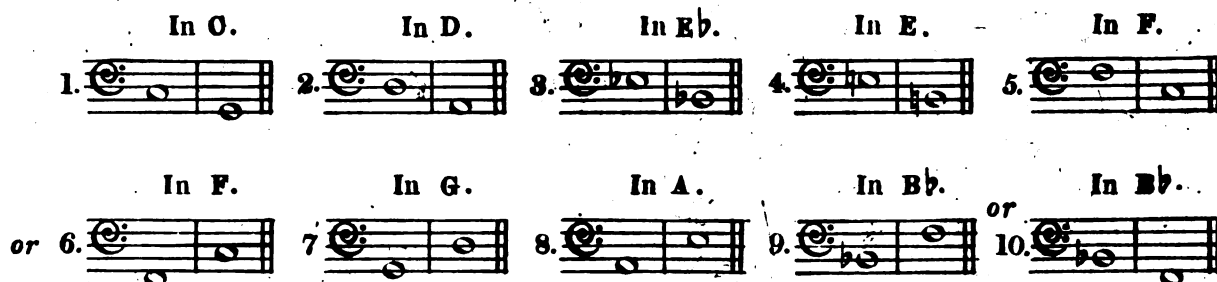
They frequently double the horns an octave higher, when used to reenforce the mass of the orchestra.

The trumpets in D produce the above notes a major second higher; and the trumpets in E flat produce them a minor third higher.

The *Fanfare* is commonly performed with the trumpets and kettle-drums only. Scarcely more than two chords can be employed in it— that of the tonic and that of the dominant.

REMARKS ON THE EMPLOYMENT OF KETTLE-DRUMS.

They have but two sounds— the tonic and the dominant; but they may be transposed in to different keys, for example:

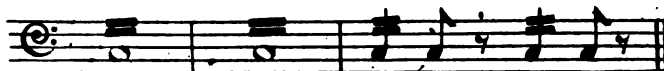


Composers indicate the key at the beginning of the piece, and usually write as if the drums were always in C.

The two notes of the drums should be employed as real notes of the harmony.

The drums are used in *piano* as well as in *forte*. They often produce the base-notes of the harmony, particularly in the pedals.

The rolling is indicated by *tr* or by the Italian word *tremolo*; but when it is of short duration it is indicated simply by thus:



The clarinets, horns, trumpets, and kettle-drums may have their pitch changed in the course of a piece. In this case, care must be taken to give them a rest of several measures, in order that there may be time to make this change.

(145) Yet they may also be set in E, F, and B flat. In G, in A, in B, and A flat, those in C, D, E, and E flat must assist. These, as well as the horns, have the parts always written in the major key of C only, and are marked at the beginning with the keys in which they are to be tuned.— C.

OF THE TROMBONES.



This instrument produces great effect, when employed properly. It serves particularly to strengthen the base-notes in the great masses.

The trombones play in all keys without transposing: hence they are written like the basses, bassoons, and altos, with the accidentals at the clef.

COMPASS OF THE ENGLISH HORN.

This instrument is very soft and may be used with success in the orchestra. It must always be treated in *solo*, because it would not be appreciable in the *forte* of the masses.

Its real compass includes the notes contained between and The following note is wanting

It is usually played by persons who play the hautboy; and therefore it will be well to write it always a fifth higher than its real pitch. The following is a table on this subject.



Sometimes two English horns are employed instead of two clarinets or two hautboys; but it is always in pieces of a calm or religious character. All instruments which, like this, can vary the tone agreeably are valuable in an orchestra.

ON SOME INSTRUMENTS IN USE IN MILITARY MUSIC.

Military music, very different from chamber-music or that of the orchestra, receives a peculiar character from the employment of some instruments which are made use of in it: some are indicated by a single note and others have a compass with which it is indispensably necessary to be acquainted. They are divided into two classes. The first comprehends the instruments of harmony which are added to those of the orchestra, and the

compass of which I have given. These instruments are — the *small flutes* and *small clarinets in E \flat and in F*, and the *serpent*.

The second class comprehends the noisy instruments, the sound of which does not enter into the combinations of harmony, employed to increase the energy and strongly mark the times and measure. These instruments are the *triangle*, the *cymbals*, the *great drum*, the *small drums* and the *Turkish crescent* or *Chinese bells*. They are written in the following way.

1st Great Drum. 

2nd Turkish Crescent. 

3rd Triangle. 


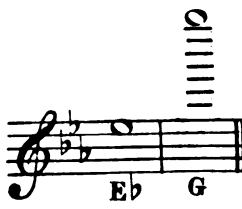
4th Small Drum. 

5th Cymbals. 

HERE IS THE COMPASS OF THE THREE INSTRUMENTS OF
HARMONY, WHICH ARE USED BUT IN MILITARY MUSIC.

OF THE SMALL FLUTE IN E \flat .



It is a semitone higher in pitch than the small octave flute.

Its compass is  which consequently corresponds to 

It plays in D, (the easiest and most brilliant key for this instrument,) when the piece is in E \flat ; and consequently it transposes a minor ninth higher than the written notes.

OF THE SMALL FLUTE IN F.


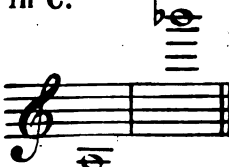
It is a minor third higher than the small octave flute.

Its compass is  which corresponds to 

It plays in D when the piece is in F, and consequently it transposes a minor tenth higher than the written notes.

OF THE SMALL CLARINET IN F.


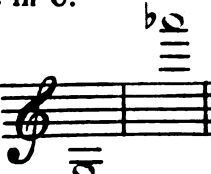
It is a perfect fourth higher than the usual clarinet in C.

Its compass is  which corresponds to 

It plays in C when the piece is in F, and consequently transposes a perfect fourth higher than the notes indicated.

OF THE SMALL CLARINET IN E \flat .

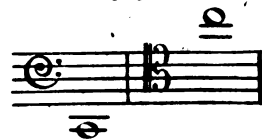
It is a minor third higher than the common clarinet in C.

Its compass is  which corresponds to 

It plays in C when the piece is in E flat, and consequently transposes the written notes a minor third higher.

OF THE SERPENT.

When a skilful player makes use of this instrument, it has the following compass:



It plays as the bassoon, without transposing, in other words the notes are produced by it of the pitch written.

COMPASS OF THE VOICES IN CHORUSES.

Soprano or
1st treble.



It is often written likewise
in the C clef on the 1st line.



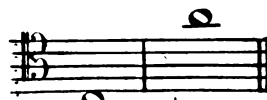
It is the same compass as the tenor, an octave higher.

Contralto.
(Contra-Alto.)



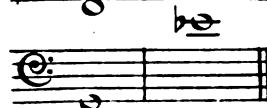
The same compass as the
base, an octave higher.

Tenor or
Tenore.



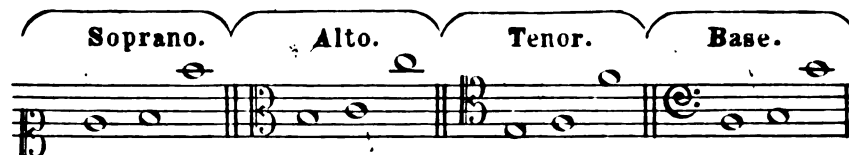
The same compass as the
soprano, an octave lower.

Base or
Basso.



The same compass as the
contralto, an octave lower.

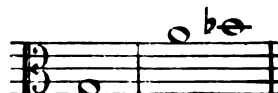
The voices should be employed as much as possible in their middle sounds: these are of the following compass:



When the voices are often obliged to sing above this medium, they become fatigued and end by squalling. The notes below have not sufficient power and consequently render the harmony dull and feeble: they must be rarely used and never in all the parts at once.

The true contralto is not in use in France. The counter-tenor which is substituted for it, and which is equally written in the C clef on the third line, is a man's voice which has indeed more power than a contralto voice, but which has also the inconvenience of not being able to ascend so high, which often leaves too great a distance between it and the treble-voice.

The compass of this counter-tenor is commonly



The compass of the voices given above are those which may be required of all persons who profess singing. It is commonly made use of by composers in *choruses, duos, concerted pieces*, and even in difficult airs, when they do not write specially for persons whose compass of voice is extraordinary.

Nothing positive can be said respecting these latter voices. One person has beautiful high notes, another low, and a third may unite both these advantages. It is the composer's business to make himself acquainted with the real compass of every voice for which he writes, when he intends to display them to advantage.

APPENDIX, BY CARL CZERNY. ⁽¹⁴⁶⁾

ON THE FORMS AND CONSTRUCTION OF MUSICAL COMPOSITIONS.

§1. As it is indispensably necessary for a poet or an author to acquire by extensive reading an intimate knowledge not only of the classical, but, as much as possible, of all the literary productions which are deemed of any importance, at least in his day; so, a composer should remain as little unacquainted with those musical works, on which time has set the seal of lasting worth, as with others of the present period which seem destined to give a new direction to taste, or to the mechanical details of performance. It is only as he receives within himself the noble forms of the great masters of every age and impresses them

(146) The translation of this Appendix has been prepared by the Editor. — Ed.

on his memory— without, however, neglecting the claims of the period in which he lives, the refinement of taste, and the greater effects of newly-invented or improved instruments,— it is only thus that his imagination can be incited to the production of similar works of art, and that he can keep pace with the times.

§ 2. Of all musical instruments, the Pianoforte is that which ranks first for this purpose, not only on account of the great number of important works which have been expressly written for it by the greatest composers, but also because every species of composition can be produced and practically studied on it, and we can likewise try our own ideas on this instrument, and convince ourselves of their effect. It is therefore of the greatest advantage if the young composer has studied a good Pianoforte School, and, without of necessity being a virtuoso on the instrument, if he has sufficiently acquired the habit of writing for it in a naturally suitable and practicable style, and is at least able to play so well as to enable him to make an intimate acquaintance with all the Pianoforte works of *BACH, CLEMENTI, HAYDN, MOZART, BEETHOVEN*, and the more modern authors.

§ 3. The works generally written as solós for the Pianoforte, according to their principal species, are:

- | | | |
|-----------------|---|---|
| (a) The Sonata. | ⋮ | (d) The Fantasia and the Capriccio. |
| (b) The Rondo. | ⋮ | (e) The Prelude and Fugue. |
| (c) Variations. | ⋮ | (f) All kinds of Dance-music and Marches. |

OF THE SONATA.

§ 4. The Sonata-form is the most important of all, as it not only comprises in itself all the other kinds, but may also serve as a type for nearly all instrumental, and even for many vocal compositions. The Trio, the Quartett, the Quintett, (with or without the Pianoforte), the Symphony, and even the Overture and Concerto, have no other construction, than that of the regular Sonata.

§ 5. The Sonata usually comprises 4 or 5 independent movements,

THE 1st MOVEMENT consisting of a *first part*, more or less extended, which is generally repeated; and of a *second* (and longer) *part*, admitting of an artistical and varied development:

THE 2nd MOVEMENT consisting of an *Adagio*, *Andante*, or *Allegretto Scherzando*, or even of a *Theme with Variations*; but always in a more tranquil flow than the first movement:

THE 3rd MOVEMENT consisting of a *Minuet & Trio*, or *Scherzo*, in a more or less rapid time, which rises even to the *Capriccio* and gives full scope to every musical fancy. *Dance-melodies*, too, are here applicable, so far as the character of the whole permits:

THE 4th MOVEMENT consisting of the *Rondo* or *Finale*, which may even be preceded by a slower *Introduction*. A more or less strict *Fugue*, treated in the Pianoforte style, or that kind of *Rondo* which will be mentioned further on, may here also have place as a *Finale*.

OF THE FIRST MOVEMENT OF A SONATA IN A MAJOR KEY.

OF THE FIRST PART.

§ 6. The opening, which is generally in a more or less rapid *Allegro*-time, and which may be preceded by a slow, suitable *Introduction*, may consist either of an energetic phrase, or of a rhythmical melody, or even of a short figure, which, as the principal idea, is then developed through the entire movement; and the *character* expressed by it— whether that be serious, pompous and brilliant, gentle and delicate, or fanciful and mysterious— must be preserved throughout the movement, as far as the requisite change in the ideas permits. After the close of the opening period follows the continuation of it, which according to the established plan, may be more or less extended and modulated, until it leads into the middle subject; which, agreeably to the following fundamental rule, which applies equally to all kinds of musical composition, must be *in the Dominant Major* of the original key.

§ 7. It is founded on experience that, in all major keys, every modulation into a *sharper* relative key (where, for instance, keys with sharp signatures have a \sharp added to them, and those with flat signatures have their number lessened by a \flat), increases the interest and excites the attention; while, on the contrary, modulation into a *flatter* key (by an additional \flat or the removal of a \sharp) in a manner fatigues the ear afresh. Therefore, the modulation into the *dominant* (for example, from C to G, from B flat to F, from D to A &c.) must be regarded as a natural law, involuntarily required by the ear; in consequence of which, the first part of a musical composition, of whatever kind it may be (provided it only exceeds the length of an ordinary *Theme*), must modulate in the middle into the key of the dominant, introduce the middle subject in this key, and also conclude in it. It would be scarcely endurable if, for example, in a Sonata in C major, the middle subject and the conclusion of the first part were in the key of F.

§ 8. The invention of the middle subject is always one of the most difficult tasks for the composer; for it must be new, and more interesting than all which has preceded it, strikingly different from the previous portion of the work and yet suitable to it: naturally arising out of the whole, it should satisfy in an agreeable and lively manner the expectation created by all the preceding modulations and cadences. Those middle subjects are usually the most satisfactory which present themselves to the fancy of the composer at the time of the invention of the principal theme.

§ 9. The continuation of the middle subject must follow with the like unconstraint; which then, either by brilliant or energetic figures (which may be founded also on a new melody), or by an interesting development of the principal theme, hastens to the close of the first part, where, after a perfect cadence, a shorter melody may still be introduced, and then a preparation be made for the repetition of the first part. If extraneous modulations are employed in this development, they must be only transitory, and the key of the dominant must always predominate.

OF THE SECOND PART.

§ 10. If, in the first part of a regular Sonata, the composer should feel somewhat fettered by the prescribed forms, he has, on the contrary, in the second part, a wider field for unfolding

his ideas, developing the themes previously employed, interweaving new subjects and modulations, and, when the Sonata is written in the brilliant style, of introducing interesting passages. However, we must not here think of abandoning ourselves to an irregular Fantasia. The construction of the second part, until the re-entry of the principal theme, must exhibit a well-arranged plan, a consistent development of the sensations expressed in the first part, with constantly increasing interest, and an unconstrained return to the opening period at the proper time. An arbitrary rambling about in extraneous keys, a mere fantastic interchange of the themes and passages, or the interweaving of foreign ideas, which, as not belonging to the whole, only divert the train of thought— all this would not form the symmetrical picture which should distinguish the second part as an æsthetical work of art, and in which *MOZART* and *BEETHOVEN*, in particular, have left such perfect models in their Sonatas, Trios, Quartetts, Symphonies &c.

§ 11. In regard to the modulations practicable in the second part of the first movement, although it would certainly be most honorable to the composer if, in order to increase the interest, he should only require those natural ones which are given in Part I of this work (page 60), and which, *with solid and well-arranged ideas*, are sufficient even for the most varied developments, transitions may nevertheless be made into more distant keys (indeed even into those the most remote) provided they surprise in a really agreeable manner— do not marr the general effect— and are so disposed as to return naturally to the principal key. Something of peculiar beauty, calculated to fix the attention, may be introduced in the concluding bars leading back to the principal theme, when such bars have been well-prepared.

§ 12. Lastly, when we have again returned to the principal theme, it is repeated without unnecessary protraction; then follows a cadence of the middle subject in the key of the piece, and after it the passages which have already occurred in the first part are again introduced (these, however, are better given with a few changes); to which may still be added, in Sonatas of greater extent, a more particular conclusion, terminating the whole either energetically or by gently dying away.

§ 13. The entire length of the first movement may vary, according as we are disposed to write a grand, an ordinary, or a little Sonata (in the latter case, called a *Sonatina*); but the composer must well observe that a greater extent should result, not so much from a greater number of different ideas, but from the greater *importance* of them, from the general plan and development, and from an ever-increasing interest: and he must also strictly bear in mind, that a *long* Sonata is not necessarily a *great* one. It is a rare, but very essential qualification in a composer, (which can only be acquired through innate feeling and considerable experience,) *to know when to stop at the right time*; for *tediousness* is the most dangerous rock for any musical composition. Yet, on the other hand, there are instances in which an otherwise successful work fails to produce effect, because it breaks off too quickly and unexpectedly.

♩ 14. The following *Sonatina* (a first movement), and the accompanying remarks, will render all that has been said more intelligible to the pupil.

Allegro.

SONATINA.

The musical score is written for piano and consists of 21 measures, numbered (1) through (21). The tempo is marked *Allegro.* The key signature is one sharp (F#). The time signature is common time (C). The score is divided into five systems, each with a grand staff (treble and bass clef). The first system contains measures (1) through (4). The second system contains measures (5) through (8). The third system contains measures (9) through (12). The fourth system contains measures (13) through (16). The fifth system contains measures (17) through (21). The score includes various musical notations such as dynamics (*p*, *f*, *sf*, *fz*, *Dim.*), articulation (*Cres.*, *Dim.*), and performance instructions (*loco*, *gva*). The piece concludes with a final cadence in measure (21).

This musical score is for a piano piece, spanning measures 22 to 44. It is written for a grand piano with a treble and bass staff. The key signature has one sharp (F#), and the time signature is 4/4. The score is divided into six systems, each containing two staves. Measure numbers are placed below the staves. Dynamics and articulations are indicated throughout. The piece begins with a *Dol.* (Dolce) marking in measure 22. Measures 23-26 show a gradual increase in volume, marked with *Cres.* in measure 26. Measures 27-30 feature a *p* (piano) dynamic in measure 27, followed by a *f* (forte) dynamic in measure 29. Measures 31-33 show a *p* dynamic in measure 31, followed by a *Cres.* marking in measure 32. Measures 34-36 feature a *f* dynamic in measure 34, followed by a *sf* (sforzando) dynamic in measure 36. Measures 37-40 show a *p* dynamic in measure 37, followed by a *pp* (pianissimo) dynamic in measure 39. Measures 41-44 show a *Cres.* marking in measure 41, followed by a *f* dynamic in measure 43. The piece concludes with a final chord in measure 44.

Measures 22-44. Dynamics include *Dol.*, *p*, *f*, *Cres.*, *sf*, and *pp*. Measure numbers are indicated below the staves.

ff (45) (46) *Dim.* (47) *p*

(48) *ff* (49) (50) *Dim.*

p (51) (52) *ff* (53)

Dim. (54) *p* (55) (56)

(57) (58) *Cres.* (59) (60)

leggiero *fp* (61) (62) (63)

Detailed description: This is a page of musical notation for piano, spanning measures 45 to 63. The score is written in treble and bass clefs. It features various dynamic markings including fortissimo (ff), piano (p), decrescendo (Dim.), crescendo (Cres.), and fortissimo-piano (fp). The tempo/style marking 'leggiero' is present in measure 61. The notation includes complex rhythmic patterns, slurs, and ties. The page number 325 is in the top right corner.

Musical score for piano, measures 64-84. The score is written for two staves (treble and bass clef) and includes various dynamic markings and performance instructions.

Measures 64-66: Crescendos (Cres.) leading into measure 65.

Measures 67-70: *f* (forte), *fz* (forzando), *p* (piano).

Measures 71-74: *Dol.* (dolce).

Measures 75-77: *pp* (pianissimo), *f vivo* (forzando vivo), *sf* (sforzando).

Measures 78-80: *sf* (sforzando).

Measures 81-84: *Dim.* (diminuendo), *p* (piano).

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Dol. (85) (86) (87) (88) (89)

(90) (91) (92) (93)

p Dol. (94) (95) *Cres.* (96)

(97) (98) *fz* (99)

p *pp* (100) (101) *p* (102) *pp* (103)

(104) *ca* (105) *lan* *do.* (106) *ppp* (107)

9489

REMARKS ON THE FOREGOING SONATINA.

§ 15. This Sonatina, according to its design, is of a tranquil character, which is only occasionally enlivened by quicker figures and passages. It is constructed on the simple idea



which frequently recurs, either in the treble or in the base, in different parts of the general scale, and is therefore considerably developed.

ON THE FIRST PART.

§ 16. The first eight bars form the theme, comprising a complete period; and as this theme is rather of an harmonic than of a melodic nature, if it had been desired to have extended the whole work, a melody might have been added to it (but still in the principal key) before the entrance of the modulating continuation.

At bar 9, the continuation begins, which is formed out of the 1st and 4th bars of the theme, and modulates first into A minor (bars 11 and 12) and then into G major (bars 13 and 14), the nearest related keys, and in the 15th bar the transition into the *dominant* is decided. We might have remained longer in each of these keys, or introduced still further modulations, provided the ideas so unfolded were not mere stop-gaps, and the expectation of the hearer for the middle subject were not too long disappointed.

From bar 16 to bar 21 occurs the cadence leading to the middle subject. In grander Sonatas this cadence can be rendered more brilliant by means of passages, or more interesting by agreeable involutions.

From bar 22 to bar 28 appears the simple middle subject, which, however, in Sonatas of a grander cast, may be either repeated (and perhaps also embellished) or its melody may be still further amplified.

Bars 29 to 36 contain the passages leading to the close of the first part, which are likewise founded on the principal theme. Here an opportunity is presented to the composer for the introduction of brilliant passages, or energetic and elaborate periods, in which also may be included any modulations which do not lead the ear and the mind too far from the established key, and from the general character of the piece. These concluding passages of each part, constitute, in the brilliant Pianoforte compositions of modern times (as Sonatas, Rondos, Trios, Quartetts, Concertos &c.), a peculiar form; which consists not merely in an arbitrary accumulation of different figures, but demands a regular and tasteful concatenation of them, until the dazzling conclusion; the best models of which will be found in the great Pianoforte works (with and without accompaniment) by HUMMEL, MOSCHELES, KALKBRENER &c.

From bar 37 to bar 44 follows a short final melody (a reminiscence of bars 16 to 19, for the sake of unity) and then the energetic and abrupt conclusion of the first part, which is again unconstrainedly succeeded by the principal theme, by the repetition of the first part. This repetition, however, may be effected by a few notes of transition, by a *rallentando*, or even by a pause on the chord of the *dominant seventh*.

ON THE SECOND PART.

§ 17. In this Sonatina, the penultimate (43rd) bar of the first part lends its short figure for the continuation of the second part, and which, with fragments of the principal theme, forms a phrase of four bars, which is repeated three times in different, but not too remote keys, until the 54th bar. More than a triple repetition of such a modulatory phrase would be too much; and even the third time a change or an abbreviation may be made, as is the case here. This abbreviation is introduced here, for the purpose of modulating into *A flat major* (bar 55), which, by its near relation to *C minor*, leads back in a natural manner to the principal key and the theme. After the principal subject has been again more firmly impressed on the memory, in bars 55 to 60, the chord of the augmented sixth on *A flat* (bar 60) establishes the return to the dominant of the principal key, where the principal theme, *abridged*, forms a half-cadence, after which (bar 69) the commencement of the Sonatina again recurs.

In the second part of grander Sonatas, after a prepared and well-defined cadence, the middle subject, or a new but appropriate theme, may be introduced in a more or less distant key, and, if practicable, interwoven with the principal subject. But, in this case, the greatest attention must be paid to the preservation of unity, roundness of period, and natural arrangement.

From bar 69 to bar 75 follows the principal theme, but with some changes in the harmonic accompaniment, for the sake of variety; after which (bar 76) a rather lively continuation in the subdominant leads to a shortened cadence in the dominant of the principal key—then to the middle subject (bars 85 to 91), which also is slightly varied—and, lastly, after a concluding passage, to the tranquil little pedal point on the tonic (bars 100 to 104) and to the calm close, which is here more suitable to the gentle character of the entire movement, than a more energetic one would be.

REMARKS ON SOME EXCEPTIONS TO THE FOREGOING PRINCIPLES.

§ 18. It has already been stated, that the middle subject of the first part of a musical composition must always be given in the key of the dominant.

BEETHOVEN, however, and after him several modern authors, have sought to enhance the effects of this modulation by departing from this rule; thus, for instance, the above-named composer has modulated, in many of his Sonatas &c, from the *Tonic* (major) into the *Mediant*, (that is, into the major third above, as from *C major* into *E major*, or from *G major* into *B major*), and in this key, apparently so remote, has introduced the middle subject and the close of the first part. In like manner we find, in some of his other works, the modulation into the *Submediant*, (as from *C major* into *A major*, or from *B flat major* into *G major* &c.)

It is natural that only a very experienced composer can be allowed such exceptions; and, indeed, only in those cases where the plan and the ideas of his composition freely admit of them. We here give the scheme of **BEETHOVEN'S** Grand Sonata in *C major*, Op. 53, which is composed in this way, and advise the pupil to compare it with the original, by which means he may review and study both the harmonic construction and the order of the ideas of this noble work in a highly instructive manner.

HARMONIC GROUNDWORK OF BEETHOVEN'S SONATA OP. 53.

All^o con prio.

The musical score is presented in a grand staff format, consisting of a treble and a bass clef joined by a brace. The key signature is one sharp (F#), and the time signature is common time (C). The score is divided into six systems, each containing five measures. The measures are numbered 1 through 50 at the top of each staff. The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings. The dynamics include *pp* (pianissimo) at measure 1, *f* (forte) at measure 12, *p* (piano) at measure 13, *Cres.* (Crescendo) at measures 9, 23, and 49, and *Dim.* (Diminuendo) at measure 31. The score concludes with a *f* (forte) dynamic at measure 50.

51 52 53 54 55 56

Cres. *Dim.*

57 58 59 60 61 62

63 64 65 66 67 68 69 70 71 72

73 74 75 76 77 78 79 80 81 82

fp *Dim.*

83 84 85 86 87 88 89 90

pp

91 92 93 94 95 96 97 98 99 100

Detailed description: This is a musical score for piano, spanning measures 51 to 100. The score is written for a grand piano with a treble and bass staff. The key signature has one sharp (F#). The tempo is marked with a quarter note. The score is divided into six systems. The first system (measures 51-56) includes a crescendo marking and a decrescendo marking. The second system (measures 57-62) includes a forte marking. The third system (measures 63-72) is a block of chords. The fourth system (measures 73-82) includes a fortissimo marking and a decrescendo marking. The fifth system (measures 83-90) includes a pianissimo marking. The sixth system (measures 91-100) is a block of chords.

101 102 103 104 105 106 107 108 109

110 111 112 113 114 115 116

117 118 119 120 121 122 123

124 125 126 127 128 129 130 131 132 133 134

135 136 137 138 139 140 141 142 143 144

145 146 147 148 149 150 151 152 153 154 155 156

fp *Cres.* *f* *ff* *Dim.* *p* *pp* *Cres.* *f* *pp*

The musical score consists of six systems of two staves each. The first system (measures 101-109) begins with a treble clef and a key signature of one sharp (F#). The second system (measures 110-116) continues the piece. The third system (measures 117-123) shows a change in the bass line. The fourth system (measures 124-134) features a series of chords. The fifth system (measures 135-144) includes a dynamic marking of *Dim.* and a *p* marking. The sixth system (measures 145-156) concludes the piece with a *pp* marking.

157 158 159 160 161 162 163 164 165

166 167 168 169 170 171 172 173

174 175 176 177 178 179 180 181 182

183 184 185 186 187 188 189 190 191

192 193 194 195 196 197

198 199 200 201 202 203 204

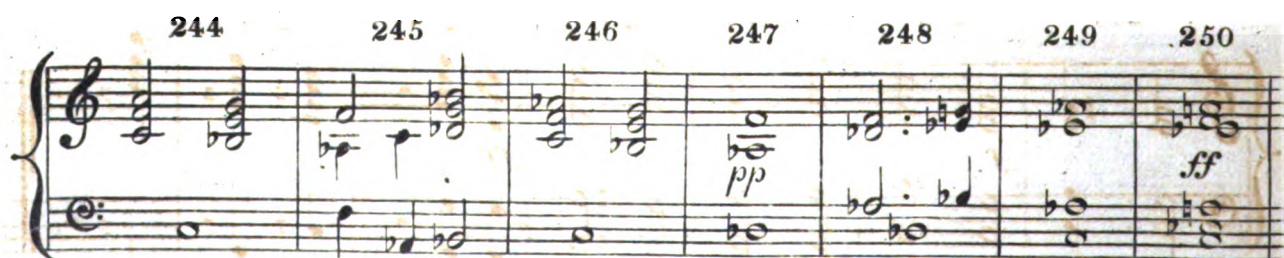
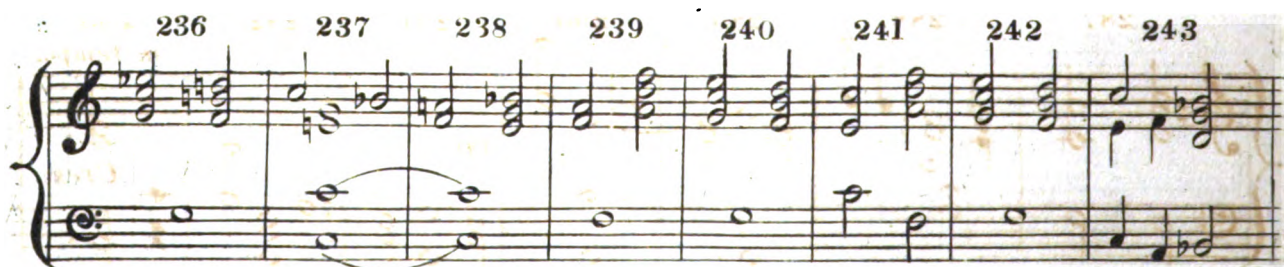
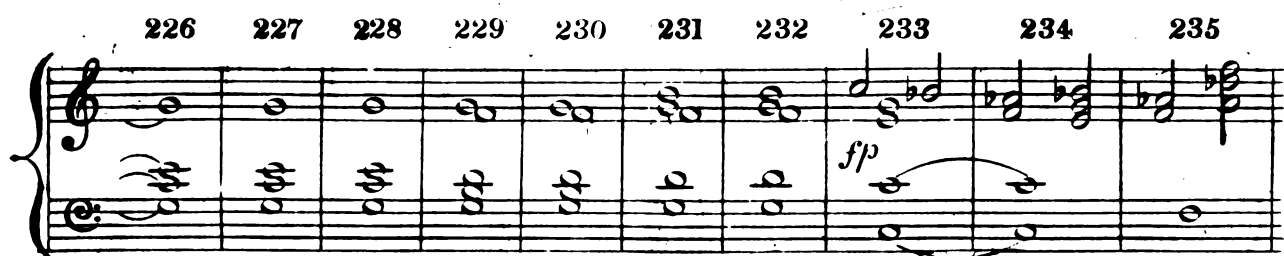
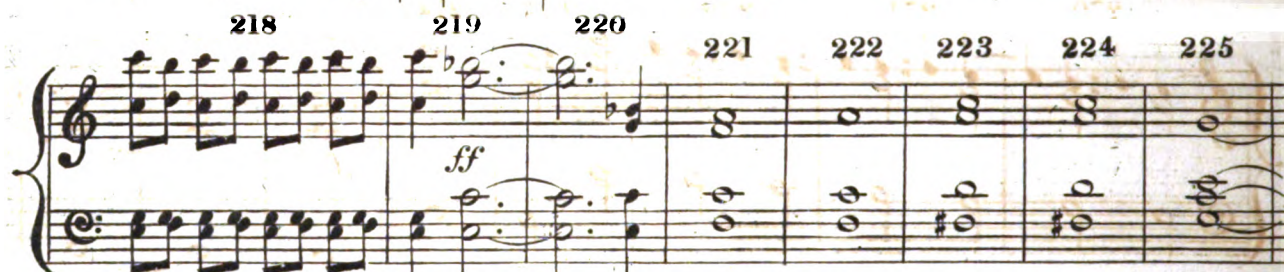
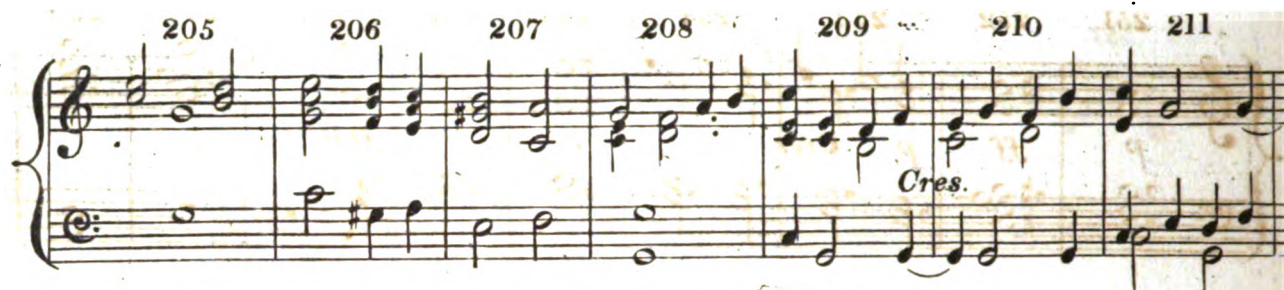
Cres.

f *Dim.* *pp*

Cres.

f *Dim.*

p



251 252 253 254 255 256 257 258 259

p ff p Cres. f fpp

260 261 262 263 264 265 266 267 268 269

Cres.

270 271 272 273 274 275 276 277

f

278 279 280 281 282 283 284 285 286

p ritar.

287 288 289 290 291 292 293

in tempo. pp Cres.

294 295 296 297 298 299 300


f ff

REMARKS ON THE FOREGOING SONATA.

§ 19. This first movement, grand both in its ideas and their treatment, contains, exclusive of the repetition of the first part, 385 bars (in C time), and, although meant to be played in a quick degree of movement, is of considerable length, which it would be rarely advisable to exceed, in a *Solo*-work. In order to avoid the serious fault of too great extent, and thereby of creating weariness among the hearers, it is very advantageous for the young composer to pay a due regard to the number of bars, and to the length of each movement calculated in minutes.

§ 20. Not less important is the following second general remark. The foregoing Sonata is, in the original, one of the most dazzling, brilliant and difficult of Beethoven. But when, on the other hand, the above real groundwork is calmly played through, how pure and noble is the whole harmonic structure! So that, if it were properly arranged for a choir, it would even be perfectly suitable for a serious ecclesiastical composition. On this classical foundation all Beethoven's works are based, and it would be difficult to recommend anything more useful to the student, than to write down the fundamental chords of a great number of them in this manner; and then, on such a ground-work, to compose pieces of his own, by way of exercise, preserving the same number of bars and the same harmonies: the melodies and passages, however, must be everywhere different from those of the original composition. (147)

§ 21. In the foregoing Sonata, after the highly significant theme has sufficiently excited the attention of the hearer by its continued interest through the first 21 bars, the modulation suddenly changes (bar 22) — and that, designedly, in a single bar lying beyond the rhythm — from the original key of C to the dominant of E minor, by means of the chord of the augmented sixth; whereupon the measured cadence introduces the beautiful *choral-like* middle subject in E major, which, like so many of Beethoven's ideas, derives its mel-

ody from the simple diatonic scale, namely: 

and which, on its repetition, is suitably varied in triplets. The subsequent harmonious imitation (bars 50 to 58) joins the brilliant concluding cadence without farther extraneous modulation; after which (bars 74 to 85), the transition to E minor naturally and agreeably prepares for the repetition of the principal theme.

§ 22. The development of the second part is founded on the principal subject (from bar 86 to bar 112), and on the imitation from the first part (from bar 112 to bar 141), in very interesting and yet natural modulations; after which, the constantly ascending passage on the dominant pedal most effectively leads back to the theme. From this point, the first part is again given in all its leading features, with the exception of some additions to the principal theme, designed to excite still greater attention, and of a quicker transition into the original key after the recurrence of the middle subject, which is here given in A major (consequently in the submediant). At bar 243, the concluding portion of the work begins,

(147) An interesting example of this kind, on a Sonata-movement by Mozart, is given by Czerny in his *School of Practical Composition* Vol. I. page 43. — Ed.

which, after a fine development of the principal theme, followed by a brilliant final cadence and some gentle allusions to the middle subject, winds up the whole in an energetic and dazzling style.

The remarkable unity and symmetry of the whole of this movement depend on the following causes:—

1st It is not overladen with too many different melodies; for it consists only of four ideas, namely: the principal theme, the middle subject, the imitation following it, and the concluding subject.

2^{ndly} The ideas, which are judiciously chosen, are always beautifully connected with each other.

3^{rdly} The modulations are naturally and rhythmically conducted.

4^{thly} Each period is of a suitable length.

5^{thly} The character of the whole, from beginning to end, is truthfully designed and preserved.

OF SONATAS IN MINOR KEYS.

§ 23. The construction of the first movement of a Sonata in a minor key differs in no other respect from that in a major, than that its middle subject is given in the *Mediant*, (consequently in the relative major key,) and the first part also concludes in the same key. In a Sonata in *C minor*, therefore, the middle subject and the conclusion of the first part must be in *E flat major*; and, in a Sonata in *F sharp minor*, they must be in *A major*, &c. Furthermore, after giving the middle subject in the relative major key, we may modulate into the dominant minor of the original key (as from *C minor* into *G minor*, or from *F sharp minor* into *C sharp minor* &c), and therein introduce all the passages which follow the middle subject and so conclude the first part in this key. Lastly, after the principal theme, we may at once modulate into the dominant minor, and give the middle subject, and all that follows, in this key. This however, is only suitable to Sonatas of a particularly earnest, gloomy, or sorrowful character, as no relief to the use of the minor keys is afforded by this method. In reference to the second part of Sonatas in minor keys, we have only to observe that, after the return of the principal theme, the middle subject following it must be given in the principal key, (minor or major).

§ 24. As the minor keys generally produce a serious, and often melancholy impression on the hearer, the composer must carefully observe, especially in instrumental works, that the ideas do not degenerate into the lugubrious, heavy and dismal; and, in minor movements, seek to rely rather on grand, than on mournful effects. The middle subject, therefore, in a major key, is always agreeable, and expected as a matter of necessity by the ear.

OF THE SECOND MOVEMENT OF A SONATA;

OR OF THE ADAGIO, ANDANTE &c.

§ 25. The second movement of a Sonata may be:

(A) A *Grave*, *Largo*, or *Adagio*, and therefore in a very slow degree of movement. Ac.

cordingly, the ideas must be so framed that they may neither sink into dissimilar and excessive motion, nor into dragging extension. The *character* of such a piece is generally earnest or sentimental, grand or gloomy, mournful or solemn. The construction of it, as well as of all other kinds, is so far like that of the first movement, as that here also the theme is followed by a continuation, a middle subject (in the dominant), a further continuation and the conclusion of the first part, and perhaps a repetition of the same, but all in an abridged form. The second part, also, admits of a slight development, after which the principal theme may again reappear, or the middle subject may at once be introduced. The numerous models of this sort which exist by *HAYDN*, *MOZART*, *BEETHOVEN* and so many modern composers, spare us the necessity of saying more on this head, especially as the pupil now knows how to analyse every species of composition.

(B) The *Andante*, *Romance*, *Allegretto* &c., admits of a more light, gay, and sometimes even facetious character, and indeed may be treated as a kind of little *Rondo*. In a pleasing and facetious style, *BEETHOVEN*, in particular, has produced some beautiful models.

§ 26. When the first movement of a Sonata is in a *minor* key, the second movement should more properly be in a *major*; but, in the case of a Sonata in a *major* key, the second movement may be either *major* or *minor*. The third and fourth movements may also be either *major* or *minor*, as we please; but, after a serious first movement, a too gay and light *Finale* would often produce too great a contrast.

OF THE THIRD MOVEMENT OF A SONATA; OR OF THE MINUET, SCHERZO &c.

§ 27. The genuine Minuet, which may be introduced as the third movement of a Sonata need not differ from the actual dance-tune of the same name, (or at most only by the addition of a *Coda*,) and therefore, as regards its form, any ordinary Minuet may serve as a model.

As soon however as this movement is marked with a quicker time, it becomes a genuine *Scherzö*, which, by modern composers is frequently carried to the quickest *Prestissimo*, and has risen to a very extended and artfully wrought class of composition, developed either in an earnest, humorous, or even odd style, and already forms a particular and very interesting species; which, by its peculiar vivacity, is also suited to act as a counterpoise to the serious character of the preceding second movement.

The peculiarities which characterize a composition of this kind are, short, intelligible ideas, a certain sportiveness in connecting them together, a clear rhythm, piquant phrases, an interesting treatment of the subject in the second part, an agreeable *Trio* (*Alternativo*,) — where even the Waltz-form in its more noble cast is admissible — caprice and drollery, provided these do not exceed the bounds of æsthetic beauty. Here, too, the Sonatas, Quartetts and Symphonies of *HAYDN*, *MOZART*, *BEETHOVEN* and other modern authors furnish the best models; the study of which will dispel all doubt from the pupil's mind as to the technical working of this species of composition.

OF THE FOURTH MOVEMENT OF THE SONATA;
OR OF THE RONDO, (FINALE.)

§ 28. The concluding movement of a Sonata (or of a Trio, Quartett, Symphony &c) must agree with the preceding movements, not only in the general nature of the ideas and their treatment, but even in regard to *character* it must not be directly opposed to them. Either a rapid course, or pleasing ideas, or an interesting conduct, must render it worthy of connection with all that precede. The subjects and ideas suited to a Rondo, must however be totally distinct from those of a first movement. It seldom happens that a theme which is well-adapted to a Rondo would be suitable to the opening of a first movement, and *vice versa*. Take the four following subjects, for example:—

A. *All^o*

B. *All^o*

C. *All^o moderato.*

D. *All^o moderato.*

and it will soon be discovered that A and C are naturally suited to the opening of a first movement, and B and D to that of a Rondo. The same remark applies to the middle subjects, which, besides, as well as the *major theme*, must likewise modulate into the key of the dom,

inant, as in the first movement, so that, in general, the harmonic construction is tolerably similar; the difference being, that, in the first movement, the subjects must appear more definite and distinct than, proportionally, need be the case in the *Finale*.

§ 29. The genuine Rondo consists of three (or even four) principal divisions or periods.

(a.) Of the theme, which also (like, perhaps, the theme for Variations) may consist of two parts, of which the first makes a full close in the key of the dominant, and the second in that of the tonic. This theme must be given entire at least three times in the course of the piece, (though, perhaps, with some alterations,) as the nature of the Rondo, derived from the French poem called a *Rondeau*, makes this obligatory.

(b.) Of the first continuation, which, as in the Sonata, joins the theme, and leads, as in that, to a middle subject and its continuation, until— after a perfect cadence in the key of the dominant, or after a cadence on the dominant seventh of the original key— the entire theme again reappears.

(c.) Of the second continuation (or principal period), which, immediately after the close of the recurrent theme, may form a new two-part subject in a relative key. When, for instance, the Rondo begins in *C major*, this new subject may be given in *C minor*, or in *F major*, or in *A minor*, or even in half-relative keys, as *F minor*, and *A flat major*. But the least suitable is the key of the dominant (*G major*), as the middle subject of the first principal period will have already appeared in it.— Immediately after this intermediate subject, or after a modulating development, follows again the principal theme, which may be at once succeeded by the conclusion, or (in works of greater extent) by—

(d.) The third continuation, for which a development of the former middle subjects may furnish the most suitable matter, and then a becoming cadence terminates the whole movement.— The works of the above-named composers furnish the pupil with sufficient models of all the forms of this species.

§ 30. The Rondo, especially in modern times, has acquired an independent character, as a great number of musical pieces, with and without accompaniment, have been published under this title and gained great favour. The construction of it in this case, remains unchanged, only that it then admits of greater extent, as well as of greater developments, alternate melodious or brilliant periods, and a preperatory *Introduction* of a greater or less length.

§ 31. This *Introduction*, mostly in a slow degree of movement, may have about the same construction as the first part of an *Adagio* or *Andante*, and be formed either on allusions to the subject of the following Rondo, or on wholly independent ideas; but the character of it must not be too opposite to that of the succeeding Rondo-movement. It is an unseemly abuse of musical effect, for instance, when a light and trifling Rondo is preceded by a bombastic *Introduction* which almost excites tragic expectations.

OF VARIATIONS, OF THE FANTASIA, AND OF THE CAPRICCIO &c.

§ 32. Having already explained all that is necessary in regard to these species of composition, in my *School of Extemporaneous Performance*, Op. 200, which is closely con-

nected with this work, I here refer the pupil to an attentive study of it, in order to avoid needless repetition.

OF DANCE MUSIC.

§ 33. In regard to the technical form of a dance-tune, the observance of the rhythm is the chief matter.⁽¹⁴⁸⁾ A Waltz, or a Quadrille (*Contratanz*), for instance, containing an uneven number of bars in each part (as 7, 9 or 13,) instead of 8 or 16 bars which are proper for it, would be a useless nonentity. All modulations, too, which would destroy the intelligible character of the melody, must be very carefully avoided.

The first part of every dance-tune may conclude either in the key of the tonic, or in that of the dominant, or even in one of the two nearest related minor keys, (in the latter case, for example, from *C major* into *A minor* or *E minor*).

The *Minuet* and the *Polonaise*, from their tranquil degree of movement, present the composer with greater opportunity for noble melodies, and even for an interesting conduct of the harmony. When the theme of a *Polonaise* &c is used for a Rondo, the theme alone retains its determinate character, the working out being the same as in any other Rondo.

OF THE PRELUDE AND FUGUE.

§ 34. The art of Fugue-composition being fully discussed in the last part of this work requires no additional comment in this place.

ON THE COMPOSITION OF MUSIC FOR TWO PERFORMERS ON THE PIANOFORTE.

§ 35. If, in writing solo pieces for the Pianoforte, much regard must be had, in the conduct of the parts, to the confined span of the hands, this ceases in the far more complete composition for two performers, which is now so highly esteemed and cultivated; as the entire compass of the instrument, together with a complete accompaniment of the middle parts, here lies open to the composer.

All the rules which are given in the third part of this work on composing in 4, 5, 6, 7 and 8 parts, are also applicable to pieces for two performers; and when the given harmony is strictly correct in itself, (whether it be in 2, 3, 4, or more parts,) it may, as in the orchestra, be doubled, tripled, or quadrupled at pleasure. However it is better, as regards the effect, when the base is only doubled in one octave; as a double octave, on the Pianoforte, too greatly overpowers the upper parts. If, therefore, for example, it should be desired to set the following passage, as full as possible, for two performers,

(148) On the subject of Rhythm, see Part IV of this work, treating of Melody.—C.

PIANO
FORTE
Solo.

it might be done, without hesitation, thus:

PRIMO
DUETT.
SECONDO

The base doubled in octaves is here sufficiently powerful to support the upper three-fold harmony. However, it must nowhere form octave-successions in similar motions with either of the upper parts. If, for example, in the third chord of the first bar, an E were added to C, G, Bb, in one of the upper parts, an error would at once arise. This applies to all doublings, in writing for two performers on the Pianoforte, as well in chords struck together, as in passages and in *Arpeggio* accompaniment. On the other hand, when we write simply in four parts, the strict conduct of the parts is as applicable here, as in the Violin Quartett.

ON PIANOFORTE COMPOSITIONS WITH ACCOMPANIMENT.

§ 36. For Sonatas, with an accompaniment for a single instrument, (*Duos*), we usually take with the Pianoforte, the Violin, or the Violoncello, or else the Flute, Horn, or Clarinet; and, indeed, any agreeable instrument suitable to a drawing-room.

The construction of all the movements of such a *Duo*, differs in no respect from that of the Solo-Sonata. The added instrument may be either subordinate (merely accompanying), or it may perform *concertante* with the Pianoforte. In the former case, we assign alternately to the accompanying instrument, only the more simple and easy passages and melodies; but, in the latter, the difficulties are divided between both.

But, when the accompaniment is *ad libitum*, the Pianoforte part must be composed complete in itself, as if there were no accompaniment, the added instrument proceeding only with the inner parts, or in the unison or octave with the melody, or with the base &c.

Moreover, every accompanying instrument must be treated according to its natural capabilities and not be distressed with needless difficulties, but rather be furnished with melodious phrases; and the passages assigned to it should not run in the same octave as those of the Pianoforte. These are matters of experience, which the young composer must endeavour to acquire by reflection, by listening to the performance of fine works, and by the study of good models.

§ 37. In *Trios*— as, for the Pianoforte, Violin and Violoncello; in *Quartetts*— as, for the Pianoforte, Violin, Viola and Violoncello; in *Quintetts*— as, for the Pianoforte, 2 Violins, Viola and Violoncello, or also partly or entirely with wind-instruments— as, for the Pianoforte, Clarinet, Hautboy, Horn and Bassoon; and so on, in *Sestetts*, *Septetts* &c., the same remarks are applicable, in respect to their construction, as in the case of the *Duo* or of the *Solo-Sonata*: except that, in augmenting the number of the instruments, regard must naturally be had to the suitableness of the ideas, to the judicious distribution of the interesting passages, and also to clear and satisfactory effects.

OF THE CONCERTO.

§ 38. The *Concerto* (whether the principal part be intended for the Pianoforte or for some other instrument) differs in its construction from the *Sonata* in the following respects:—

The first *Solo* is preceded by a *Ritornello* for the full orchestra, which has much the same construction as the first part of the first movement of a *Sonata*; except that it must conclude in the original key, or on the chord of the dominant seventh, after which the first *Solo* begins. The *Ritornello* must not be of a tedious length, though it must contain an abridged sketch of all the leading ideas of the concerto. The first *Solo* further expands this sketch, as it observes the ordinary course of modulation. The middle subject, also, may be once played by the *Tutti*; and then, after the requisite passages, the first part ends with a cadence, after which the orchestra again receives a short symphony. This first part is never repeated.

The second principal *Solo*, which forms the second part, affords full scope for the display of ability in modulation; though all the æsthetic rules of the *Sonata*, particularly as regards the unity of the whole, must here be well observed. The *Adagio* and the *Rondo*, which are frequently connected together, have the usual construction, only with *Tutti* passages intermixed. The *Scherzo* or the *Minuet* is never used in the *Concerto*. In the instrumentation of the *Solos*, the composer must be careful that the accompaniment (particularly of the wind-instruments) does not overpower the principal part.

§ 39. In order to add effective orchestral parts to a *Concerto*, great care, fancy and experience are required. A passage of the *Concerto* player, which may be perfectly simple in itself, is often rendered very interesting by a judicious accompaniment; while, on the contrary, the most brilliant passages may be entirely spoiled by an overwhelming or badly chosen one.

The wind instruments being unable to modify their power of tone so easily as stringed instruments— which, in suitable places, can be made to render a very delicate accompaniment, particularly by the *pizzicato*,— the former, especially when they have to accompany the Pianoforte, must only be used with moderation; and simply, either in sustained harmony, or merely in single notes forming the melody, or in other sustained single sounds.

Occasionally, however, full chords of both the orchestral masses produce the proper effect.

§40. The best means to acquire experience in this art of accompanying, is, (next to the frequent hearing of such compositions,) for the pupil to put into score good Concertos, by *MOZART, BEETHOVEN, HUMMEL, RIES &c.* While writing out the principal part and leaving the space for the orchestra blank, he may exercise his fancy with the kind of accompaniment which is practicable in each passage and most suitable to it. He may then add the actual accompaniment of the author, and thus he will discover to what extent it differs from his own ideas.

The most usual kinds of composition with orchestral accompaniment are: the *Concerto*, the *Rondo*, *Variations*, *Fantasias* and *Potpourris*; and the chief object of them is, that the principal part may stand out independently and as brilliantly as possible, and so distinguish the performer of it; although, at the same time, considerable musical value may be imparted to the whole.

OF THE SYMPHONY.

§41. Although the Symphony must be viewed as the most perfect production of instrumental music, both on account of the grand ideas which necessarily appertain to it, and also on account of the skilful employment of all the orchestral masses therein, its construction is in no respect different from that of the Sonata, and therefore all the rules previously given for the Sonata are applicable also to it. Consequently, it consists of the same four movements, namely: 1st Movement, where the *Allegro* may be preceded by a slow Introduction; 2nd Movement; *Adagio*, *Andante*, or even *Allegretto scherzando &c.*; 3rd Movement, *Minuet*, or more frequently *Scherzo*, with *Trio*; 4th Movement, *Finale*, which usually takes the form of the *Rondo*.

§42. In composing, there are many ways of writing and placing the orchestral parts, and we here give two different methods, under A and B.

At A, the mass of the stringed instruments (the orchestral quartett) is placed on the four lower staves, by which means the composer can rapidly survey this most important part of the orchestra. The mass of the wind instruments is so distributed above it, that, between the noisy instruments and the horns (which stand at the top) and the three trombones, the eight wood wind-instruments—consisting of two flutes, two hautboys, two clarinets and two bassoons—stand together, in an ascending order, according to their pitch.

At B, the Violins and the Viole are on the three upper staves; then follow the eight wood wind-instruments; then, the horns, trombones, trumpets and drums; after which the Violoncelli and Contrabassi (which must always stand together, on one or two staves) occupy, as the base parts, the two lower staves. This way of writing also has its advantages; as, by its appearance, the imagination can acquire a much quicker and clearer conception of the combined effect. When, therefore, the pupil writes out foreign orchestral works in score, from the single parts, by way of exercise, we advise him in every case to adopt the second method, under B.

MOZART.

(A).

BEETHOVEN.

(B).

345

Adagio.

Timpani in E \flat . B \flat . *ff*

2 Clarini in E \flat . *ff*

2 Corni in E \flat . *ff*

Flauto 1. *ff*

Flauto 2. *ff*

2 Oboè. *ff*

2 Clarinetti in B \flat . *ff*

2 Fagotti. *ff*

Trombone 1. *ff*

Trombone 2. *ff*

Trombone 3. *ff*

Violino 1. *ff*

Violino 2. *ff*

Viole *ff*

Violoncello e Bassi. *ff*

All º

Violino 1. *f sf sf*

Violino 2. *f sf sf*

Viole. *f sf sf*

2 Flauti. *f sf sf*

2 Oboè. *f sf sf*

2 Clarinetti in A. *f sf sf*

2 Fagotti. *f sf sf*

2 Corni in E. 1 $^{\text{mo}}$ e 2 $^{\text{do}}$. *f sf sf*

2 Corni in E. 3 $^{\text{zo}}$ e 4 $^{\text{to}}$. *f sf sf*

Trombone Tenore. *f sf sf*

Trombone Basso. *f sf sf*

2 Clarini in C. *f sf sf*

Timpani in E. B. *f sf sf*

Violoncello *f sf sf*

Bassi. *f sf sf*

If vocal parts have to be added, they may be most suitably written immediately above the four stringed instruments at A, and above the Violoncelli at B.

OF THE OVERTURE.

§ 43. The *Overture* has the construction of the first movement of a *Symphony*, but with the following exceptions:—

- (a.) The first part is not repeated.
- (b.) The development of the second part must not be so extended, as the *Overture* must be much shorter.— *Overtures* are generally written for the beginning of an *Opera*; in which case, some of the most striking subjects of the *Opera* may be properly employed for it: but this should not so greatly degenerate into a *Potpourri*, as frequently happens in modern times.

Moreover, the *Overture* must express, as much as possible, the leading character of the *Opera*.

OF MILITARY MUSIC.

§ 44. The *Marches* of which this species consists, must answer to their object by a proper degree of movement (generally in **C** time), by a stately and energetic character, and especially by a strict rhythm.

The first part, which most suitably consists of 8, 12, or 16 bars, generally ends in the key of the dominant. The second part, which may perhaps receive a new melody in a relative key, must have a proportionally greater extent; but it must conclude in the principal key.

The *Trio*, of a similar construction, but shorter, and having a more tranquil and agreeable character, may be most effectively set in the key of the dominant or in that of the subdominant.

Music for a *Military band* has so many peculiarities, and is in general so little understood, that the following score will assuredly be acceptable, even to many otherwise well-practised composers.

Coronation March, composed by C. Czerny, arranged for a military band by J. Resnitschëck, Chapel-master to the Prince Gustav von Wasa.

Piccolo in D \flat .

Clarineti.
1^{mo} in A \flat
2^{do} in E \flat .
3^{zo} e 4^{to}

1^{mo} in E \flat .
(with keys.)
2^{do} in E \flat .
(with keys.)
1^o e 2^o in E \flat .
(without keys.)

Trombe.
1 in D \flat .
1 in C.
1 in B \flat basso.
1 in A \flat basso.

Corni.
2 in E \flat .
1 in B \flat .
1 in A \flat .

Fagotti.
1^{mo}
2^o e 3^{zo}
Contra et
Serpent.

Tromboni.
1^{mo} e 2^{do}
Basso.

Piccolo
Tamburo.
Gran
Tamburo.

ON VOCAL COMPOSITIONS.

§ 45. As the succeeding parts of this work are particularly devoted to this subject, the following general remarks may for awhile suffice.

§ 46. Composition for Voices is strictly dependent on the prescribed text, and every musical conception, be it ever so interesting, must be perfectly subordinate to it. Nor is it sufficient to have accurately expressed the sense and spirit of the words; the music which is set to them must also be beautiful, intelligible and interesting in itself; so that, for instance, if a song, or other independent vocal work, were performed as a solo on the Pianoforte, (without the voice,) it might still form an agreeable whole, by means of its ideas and their treatment, the harmonical construction of the piece, and the strictest preservation of unity. Even in declamatory theatrical songs, concerted pieces &c, this rule has never been neglected by the great masters, *MOZART, CHERUBINI, BEE-THOVEN*.

§ 47. The shortest and simplest kind of vocal composition is the *Song*, (in Italy the *Canzonet*, in France the *Romance*, &c) which frequently consists but of one period, which, after modulating in the middle to the dominant, again immediately returns to the tonic. When consisting of two periods, it forms two parts, of which the first ends in the key of the dominant, and the whole then produces the rhythmical, established theme, suitable for Variations.

48. Of greater extent is the *Aria*, which, after a corresponding Symphony, may have a complete first part, (including a middle subject, and ending in the key of the dominant,) and, after a short interlude, a more or less developed second part; after which follows the return of the principal theme and a suitable conclusion (with a cadence).

§ 49. The *Ballad*— when the text, which is mostly narrative, is wholly set to music— is a still more extended species of vocal composition, which approximates nearer to the form of the *Fantasia*, but should nevertheless receive from the composer a precise character, and a clear and satisfactory unity, by the preservation of a leading idea, or by a consistent mode of treatment.

§ 50. Furthermore, the composer must possess a competent knowledge of the language for which he writes. He must be able to declaim correctly, and be in a condition to comprehend the metrical peculiarities of the different kinds of verse, the true scanning of them, the correct accentuation and value of the syllables, no less than the spirit and general meaning of the poem which he has chosen. In the repetition of single words or phrases he must carefully observe, that only such are selected for it as are naturally suitable and induce no contradiction. Lastly, the musical painting of single words and phrases must be always subordinate to the character of the whole, or at least not opposed to it. All this will be fully explained in the subsequent parts of this work. (149)

CARL CZERNY.

(149) All the subjects treated of in this Appendix are fully developed in Czerny's "*School of Practical Composition*" Op. 600, in 3 vols: folio, published by Messrs. COCKS & Co. — Ed.

FUGUE, ANALYSED IN RELATION TO ITS HARMONY. (150)

No. 1.

FUGUE.

for the Pianoforte..

No. 2.

The same fugue reduced to its simplest elements, and detached from all accidental notes, except the pedal.

No. 3.

Principal notes of the chords, or fundamental base.

No. 4.

The figures above this staff indicate the species of chord in conformity with our classification. The figure 2 implies the second chord, the figure 5, the fifth of this classification, and so on.

No. 5.

This staff shows what must be done in order to avoid exceptions in the succession of the perfect chords, and in the resolution of the dissonant ones.

The semiquavers must be supposed to indicate notes of greater value; for, otherwise, the succession of the chords would be too rapid.

No. 6.

The second staff of this number presents a figured base of this same fugue in a more simplified form. The upper staff shows the mode of performing the chords expressed by these figures. This number may serve as a study for those who desire to exercise themselves in the figuring and performance of complicated harmonies.

(150) In the second part of this work (page 156.) we have shown the way in which a student may analyse a piece of music, in relation to its harmony, with advantage to himself. — R.

This page contains two systems of musical notation, each consisting of three staves. The first system (top) includes a grand staff (treble and bass clef) and a separate bass staff. The second system (bottom) also includes a grand staff and a separate bass staff. The notation is in a key with two sharps (F# and C#) and a 3/4 time signature. The music features complex rhythmic patterns, including sixteenth and thirty-second notes, and various fingerings are indicated by numbers 1 through 7. The page is numbered 350 at the top left and 9489 at the bottom center.

The first system of the musical score consists of three measures. It features a grand staff with a treble and bass clef, and a separate bass line. The key signature has two sharps (F# and C#). The first measure contains a complex melodic line in the treble and a bass line with some rests. The second measure continues the melody with some chromaticism. The third measure concludes the system with a final chord. Fingering numbers (1, 2, 3, 4, 5, 6, 7) are present throughout the piece.

The second system of the musical score consists of three measures. It continues the musical piece with similar notation and fingering. The first measure shows a continuation of the melodic line. The second measure features a more active bass line. The third measure ends the system with a final chord. Fingering numbers (1, 2, 3, 4, 5, 6, 7) are present throughout the piece.

The image displays a page of musical notation, numbered 352 in the top left corner. The notation is arranged in three systems, each consisting of multiple staves. The key signature is two sharps (F# and C#). The first system includes a grand staff (treble and bass clef) and a separate staff with a 'Pedale' marking. The second system continues the musical notation with various notes, rests, and fingerings. The third system also continues the notation, including a grand staff and a separate staff with a 'Pedale' marking. The notation is complex, featuring many notes, rests, and fingerings, suggesting a technically demanding piece.

This page of musical notation, numbered 353, contains a complex arrangement of staves. The notation is written in a key signature of two sharps (F# and C#). The staves are organized into systems, with some systems containing multiple staves. The notation includes various musical symbols such as notes, rests, and fingerings. The page is numbered 353 in the top right corner.

The musical notation is written in a key signature of two sharps (F# and C#). The staves are organized into systems, with some systems containing multiple staves. The notation includes various musical symbols such as notes, rests, and fingerings. The page is numbered 353 in the top right corner.

9489

The musical score on page 354 is written in D major (two sharps) and consists of two systems, each with six staves. The first system includes a grand staff (treble and bass clef) and three additional staves. The notation is dense, featuring many notes, rests, and fingerings. The second system also consists of six staves, continuing the musical piece. The notation includes various musical symbols such as notes, rests, and fingerings. The key signature is D major (two sharps). The first system has a total of six staves, and the second system also has six staves. The notation is dense and includes many accidentals and fingerings.

rallent: un poco

Pedale

From this staff it will be seen, that it is rarely necessary to add more than one chord, in order to avoid an exception in the succession of the chords.

9489

FINE

8 MY 53

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